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IN THE MATTER OF "THE NATURAL GAS UTILITIES ACT"

—and—

IN THE MATTER OF an Enquiry into Scheme to be adopted for Gathering, Processing and Transmission of Natural Gas in Turner Valley

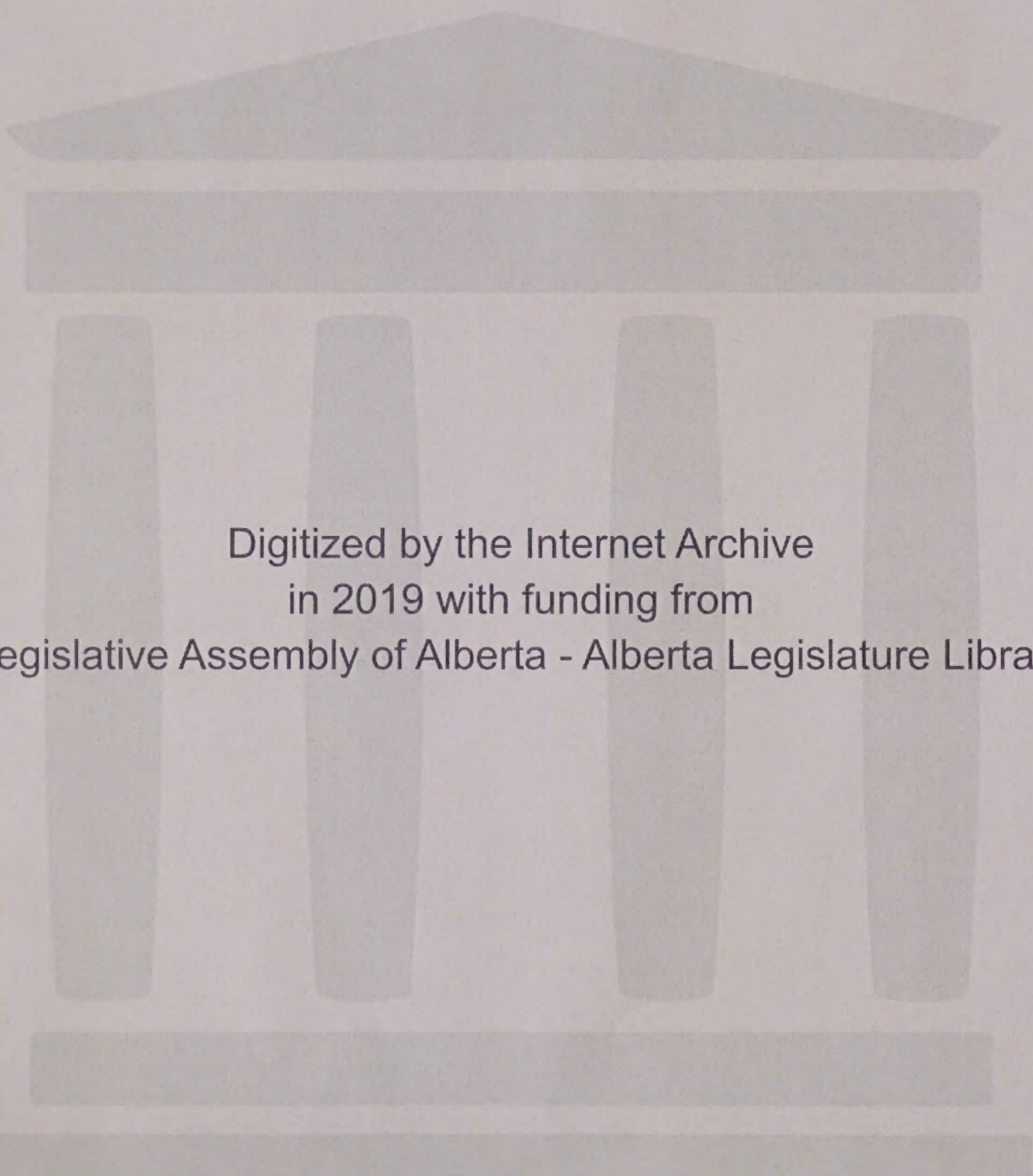
G. M. BLACKSTOCK, Esq., K.C., *Chairman*

Dr. E. H. BOOMER, F.C.I.C., *Commissioner*

Session:

CALGARY, Alberta December 11th, 1945

VOLUME 59



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I N D E X

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9.30 A.M. Session,
December 11th, 1945.

MR. BLANCHARD: Are we going to complete Mr. Donellan first?

THE CHAIRMAN: What have you to say, Mr. Harvie?

MR. HARVIE: I was going to suggest, Mr. Chairman, that we have this information in Schedule form that Mr. Donellan read into the record yesterday and we could mark that as an exhibit this morning.

THE CHAIRMAN: It will be Exhibit 133.

FURTHER SUBMISSIONS BY
MR. DONELLAN NOW MARKED
EXHIBIT 133.

ROBERT WINSLOW HAMILTON, Continued.

A At adjournment time yesterday we were considering the preparation of Statement WH 53, which is the statement setting out the cost of gathering in summary form on three comparable bases. I was about to deal with alternative basis "C" in comparison with the B.A. basis and alternative basis "B". The operating costs and the administrative costs under basis "C" are identical with the two foregoing bases but the depreciation is somewhat higher due to the fact that the rate base is higher, the rate base for basis "C" corresponding to the last rate base determination on WH 13. The depreciation charge is higher because of the higher rate base and the disparity would be greater except for the fact that the salvage allowance was taken into account in computing the depreciation requirement in the case of basis "C". In both "B" and "C" the net withdrawal throughput method was that adopted as the depreciation formula as contrasted with the 10 year amortization basis or with the B.A. basis. The rate

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of return is higher because the initial rate base is higher and because also of the salvage allowance taken into account in computing the depreciation charge which has the effect of maintaining the rate base at a somewhat higher level than if the salvage were ignored and the taking into account of salvage operates on the rate base to maintain it cumulatively. To summarize the unit cost, we have 2.85 cents on the B.A. basis and 2.4 cents on the alternative basis "B" at 15-5/6th per cent or 1.82 at 11-2/3 per cent and on alternative basis "C", 2.29 cents on the 15-5/6th per cent basis or 2.02 cents on the 11-2/3 per cent basis.

Q MR. BLANCHARD: Those figures of cost per m.c.f. are taking into account that some gas, for instance, repressured gas, will be rateable on some basis?

A That is correct, sir. We have a whole section in our report dealing with that question of what gas is rateable and what gas is not rateable and the principles which in our view at least should be taken into account in such determination. Proper appreciation of the unit cost cannot be obtained without some regard to that whole question.

Q That is dealt with in another part of the submission?

A Yes, sir. Properly speaking it should have come before this discussion of operating costs. But we had better leave that open for separate future treatment.

Now returning to Volume 2, we left off at the centre of page 46. Just to get the connection. The application of the variations suggested in basis "B-1" - that is at the higher rate of return - results in a reduction of the net over-all average cost of \$52,842 (without changing the rate of return) and is summarized as follows. I am

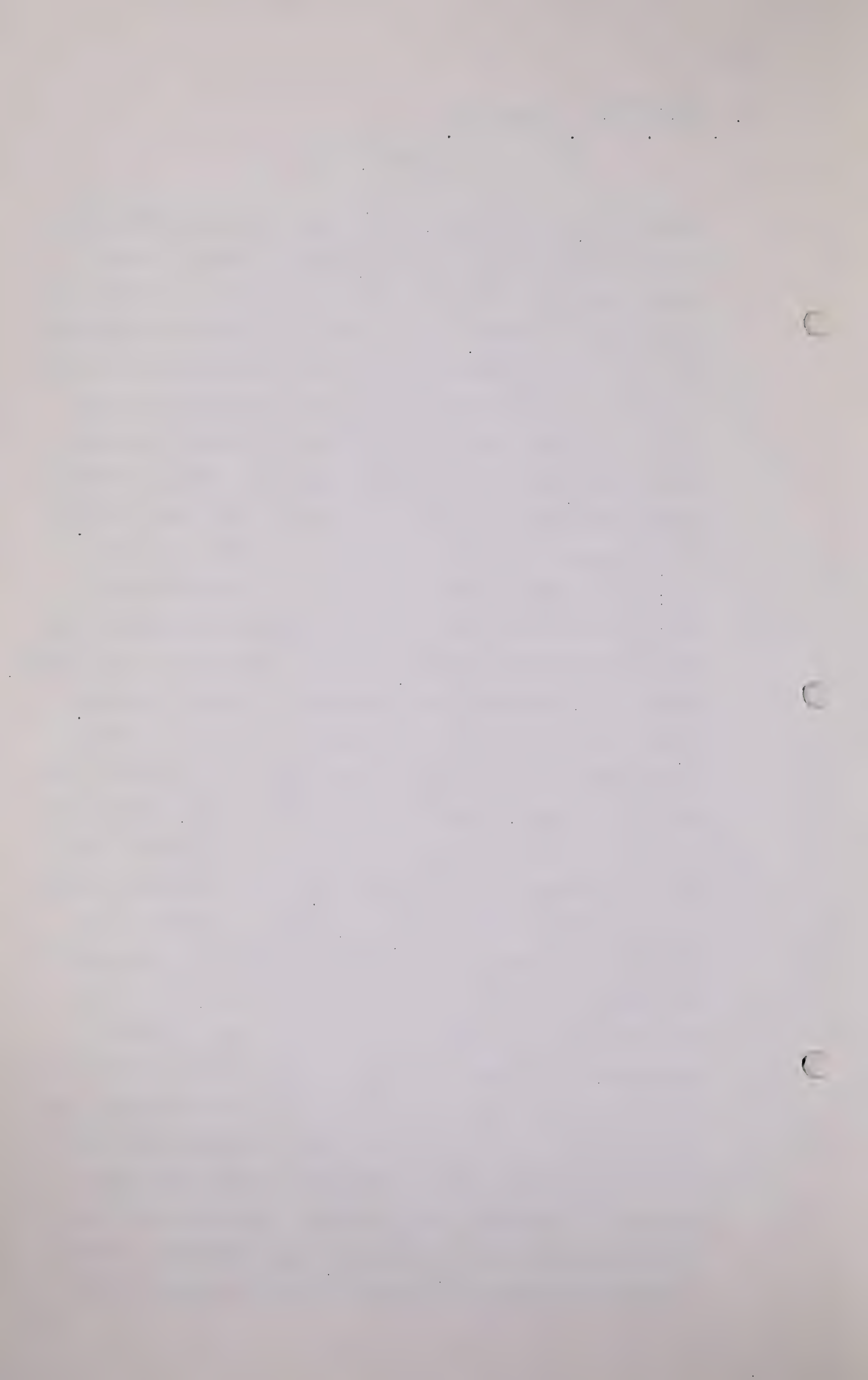
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sorry, sir, this deals with the total cost of gathering and residue transmission and repressuring. Perhaps we had better skip that discussion till we have had a look at these other two statements. I am sorry. We turn now to statement WH 54 and we find here the same sort of presentation of the functional costs attributable to the transmission of the residue gas over the main line from the British American Absorption Plant to the Madison Scrubber. The operating costs as we have them for this operation are some \$1700.00 less than the latest submission of the British American Company in Exhibit 113B. But the very same difference occurs in operating costs of the repressuring function and the two differences offset. It is a difference in the allocation of the operating costs between these two functions. Similarly with regard to the administration, our costs of administration for residue transmission are some \$390. less than in the British American submission Exhibit 113B, but there is an offsetting difference in the functional costs of repressuring. The operating costs are deemed to include one-third of the high pressure compression station costs and that fraction of one-third, together with a fraction of two-thirds charged to the repressuring function, make up the whole of the operating costs of the high pressure compression station. An apportionment of that cost between the residue transmission and the repressuring function has been arrived at partly on the volumetric basis and partly with regard to the relative pressure required for transmission as opposed to repressuring. You will notice that from the total cost of operation, administration, depreciation and return in the case of each cost compilation,

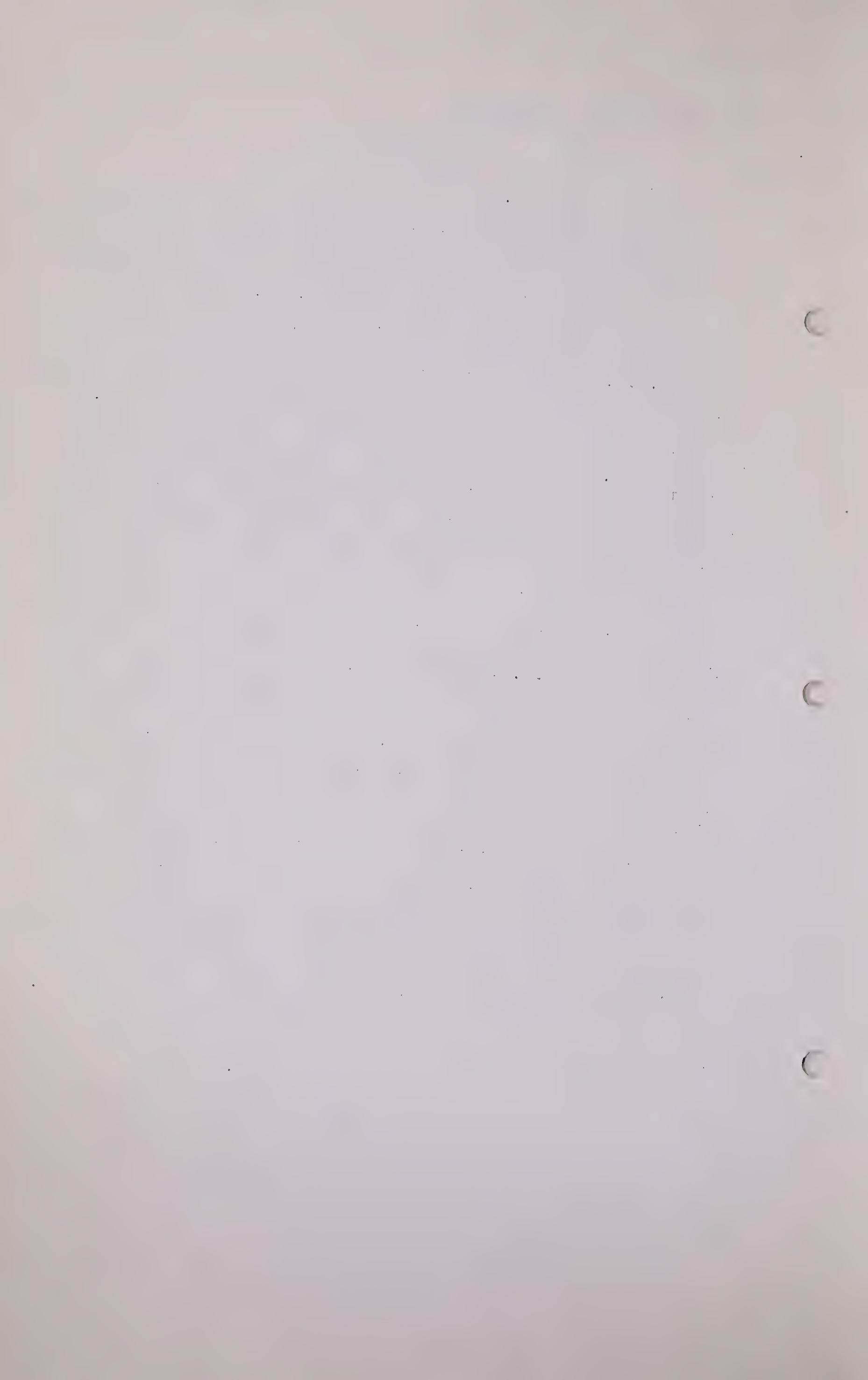


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there has been deducted an amount of \$12,000. representing the assumed contribution from Madison for the transmission of the G.O.R. gas over that portion of the line through which that gas passes after leaving Number 3 Madison plant. Fuel likewise has been assumed in the amount of \$323. for the first two years and \$291. in the latter two years, as the cost of residue transmission and that figure of course is open to discussion. The operating costs and administration are identical for all three compilations. The depreciation charge is higher in basis "B" than in basis "1", due to the higher rate base Pardon me, is lower because of the lower rate base and the rate of return is lower in the first year but gradually becomes higher in the later years, due to the fact that on the British American basis, amortization is swifter than under the net withdrawal basis proposed in basis "B". In basis "C" the depreciation charged is slightly lower than in basis "B" despite the fact that the total opening rate base is higher but the disparity between the two total rate bases mainly relates to the gathering portion of the rate base and in connection with the residue transmission. Of course all the construction is new so that the rate bases are all the same for this section of assets.

(Go to page 4665)



C-1-1 9.45 a.m.

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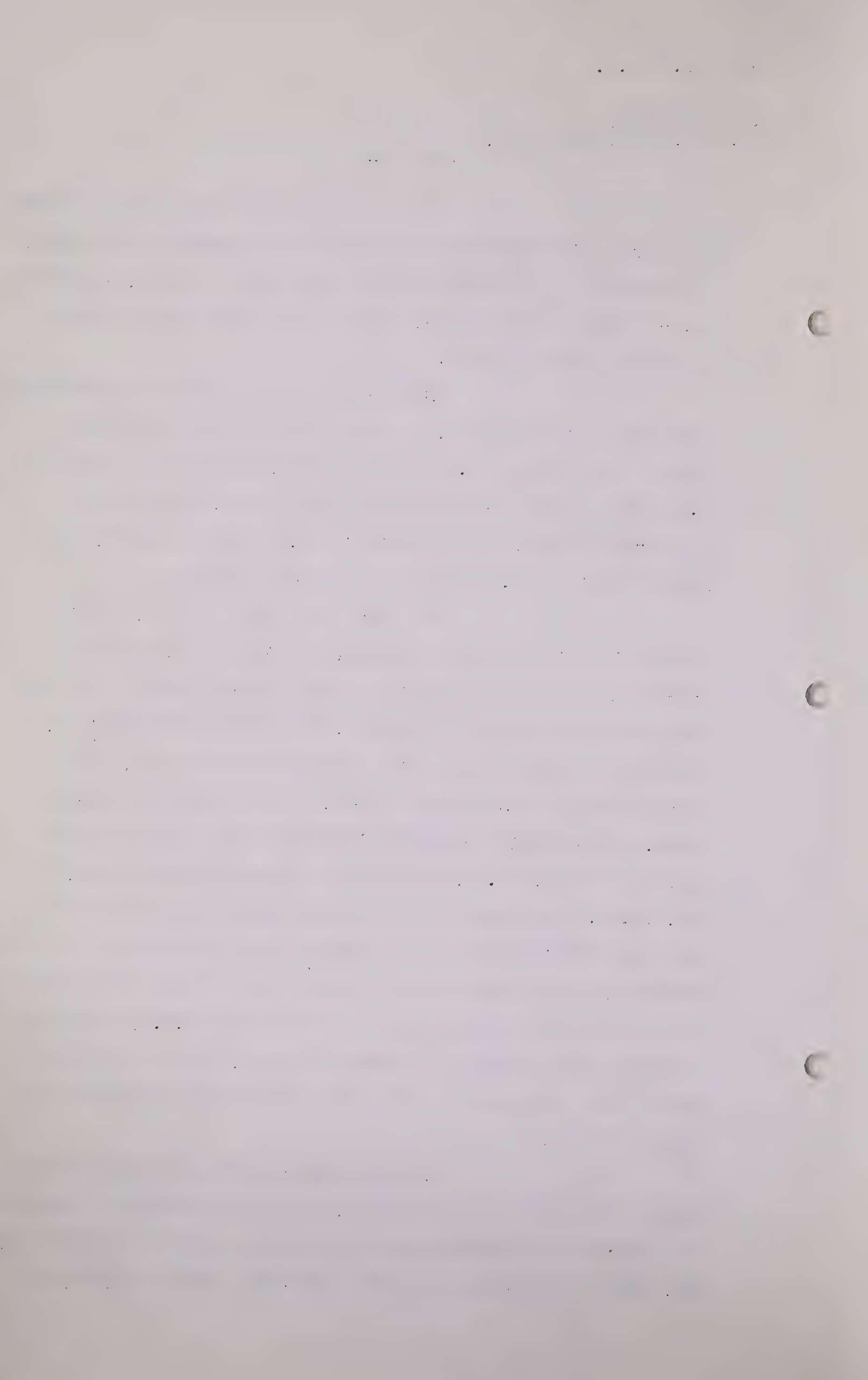
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On the other hand taking into account the salvage in computing depreciation requirements under Basis "C" results in a slightly higher depreciation charge, - pardon me, - a slightly lower depreciation charge but will result in a higher rate of return.

Summarizing the effect of the different treatments of unit costs, we have for the British American basis a net cost of 2.86 cents per MCF, and on the Basis "B" 2.55 cents on the 15-5/6% return basis, or 2.17 cents on the 11-2/3% basis, and on Basis "C" 2.52 cents per MCF on the 15-5/6% basis or 2.15 cents on the 11-2/3% basis.

In connection with the \$12,000.00 assumed contribution from Madison, we presented Statement W-H-56 with a view of arriving at some appreciation of the adequacy or otherwise of that amount. Under certain assumptions, the operating cost of the high pressure residue line, and I am now looking at Statement W-H-56, on the British American Basis, but excluding related compression costs would be one-quarter of \$256,954.00, which is the four-year total cost, or \$64,238.00. The reason for excluding compression costs is that our understanding was that the compression costs applied by the British American was to raise its gas to the appropriate pressure and the relative compression required for the G.O.R. gas would be applied at the Number 3 Madison booster, so it is a matter only of line maintenance that has to be shared between the two volumes of gas.

We then compared the estimated volumes of gas from the two sources which are to be transmitted through the line and for British American this is estimated at 2,645,475 MCF, which is one-quarter of the four-year total of 10,581,900



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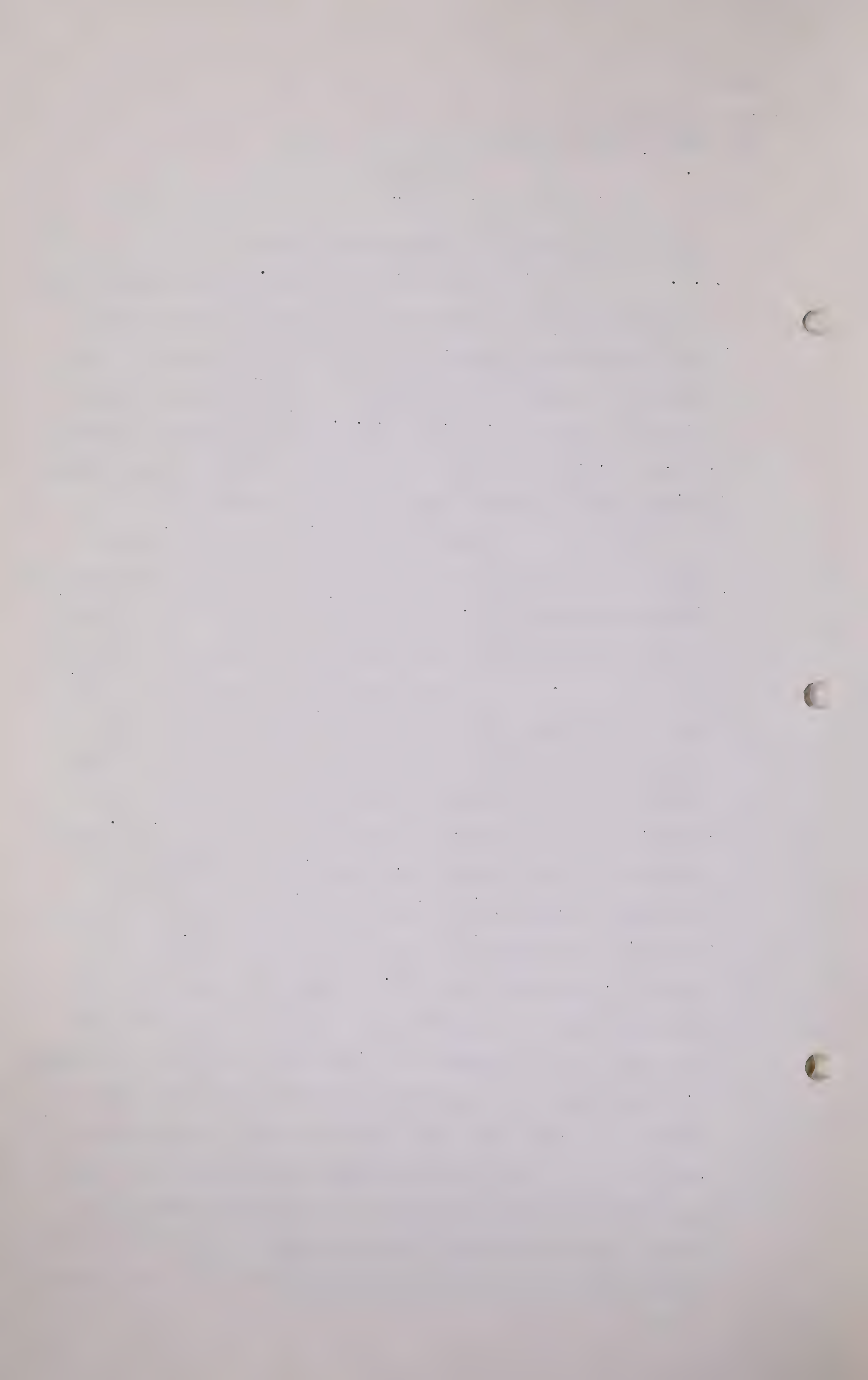
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m.c.f. as presented in our statement WH 39.

From the Gas and Oil Refineries and the information as summarized, the estimates are summarized in the same statement WH 39, we estimated one-fourth of the four-year volume of 5,104,000 m.c.f. which would amount to 1,276,000 m.c.f. and we have discounted that amount one-half in view of the fact that that volume of gas will pass through one-half of the total length of line approximately.

There are engineering points to be raised there, I suppose, in connection with these mathematical estimates but this is merely an indication of the type of calculation which will probably be necessary to be adopted.

So that the two volumes of gas are in relation to each other 80% and approximately 20% of the total rateable volume, which would suggest a split of the cost of that line 80-20, which would amount to \$51,757. for British American and \$12,481. for the Madison Company and for the sake of simplicity and because the Madison Company's submission is based on an average \$12,000 figure per annum, we adopted the \$12,000 figure. In that connection it occurred to us that it might be proper for the Board to fix, from time to time, to fix a figure for that transmission in a monthly or annual sum, to avoid controversy in unnecessary cost accounting as between the two companies, bearing in mind that almost under any set of adjustments, that cost is going to be borne by the market in any event. And it is just a matter of which company collects for it so it might be efficient and economical to fix a rate from time to time or a lump sum from time to time to save contro-



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versies which would ensue from having to work out a figure each year based on the costs as they have been for that year.

Turning now to statement WH 55, we have here a presentation of the costs of repressuring on the same three bases as I mentioned in connection with WH 54.

The operating costs and administration are slightly higher than are given in British American Exhibit 113"B", the difference being the amount which will offset the difference in connection with the operating and administrative expenses for the residue transmission to which I have previously referred.

The operating and administrative costs include two-thirds of the high pressure compression station costs, the remaining one-third having already been charged to residue transmission and that allocation again is based on the volume to be compressed for the two parties at the respective pressures required for that purpose.

Q MR. BLANCHARD: How are those two factors applied by you, Mr. Hamilton?

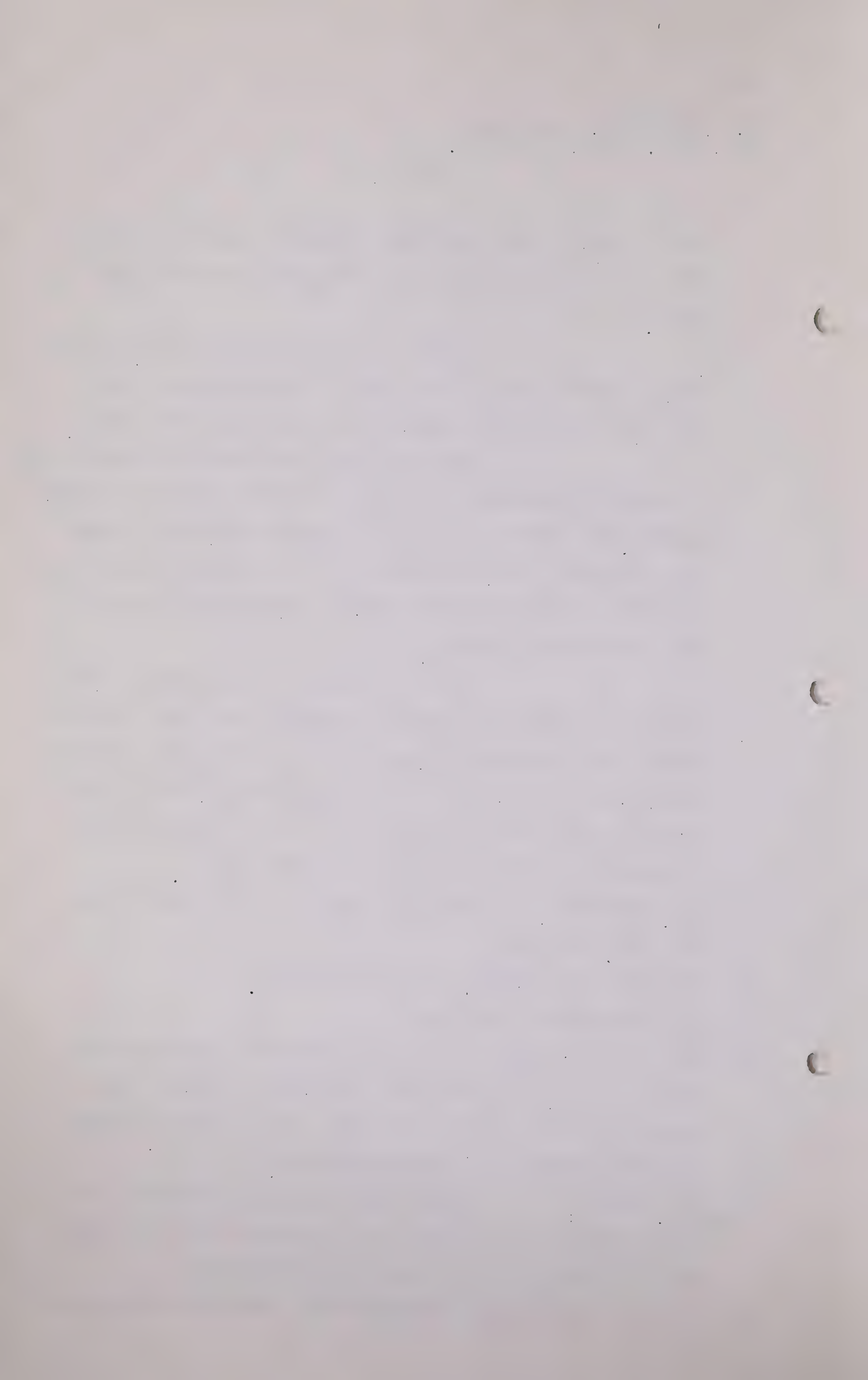
A One factor multiplied against the other.

Q Can you elaborate on that?

A It would be simpler perhaps if I prepared a little memorandum on it. It is a little difficult to get at. You weigh one factor against the other, that is what it means or what it amounts to, by multiplying.

Q MR. HARVIE: Just on that point, Mr. Hamilton, is this allocation purely for the purposes of this statement or is it based on some engineering principles?

A I have discussed the matter with Mr. McCutchin and he gave



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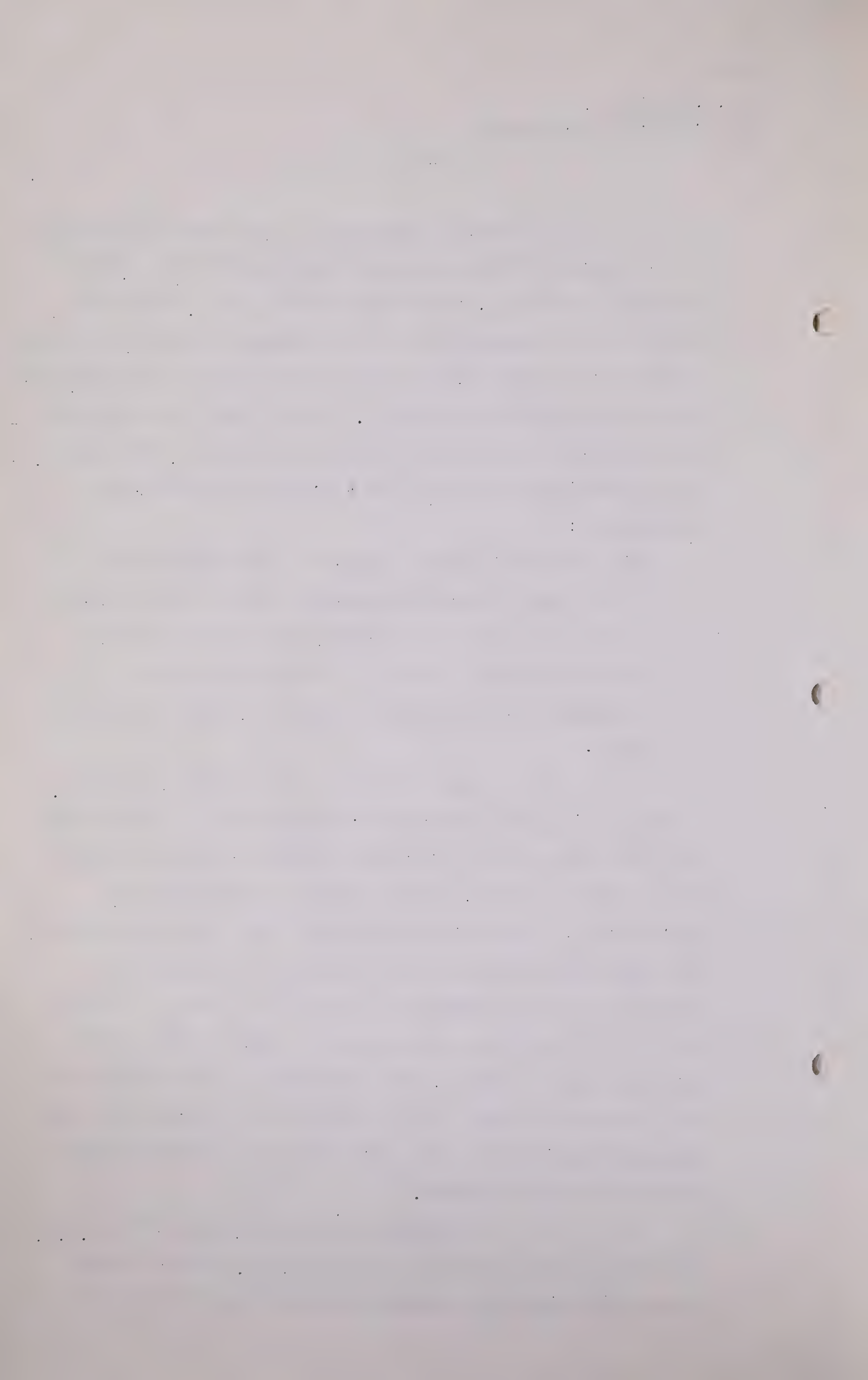
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me, at the time we were discussing it, the respective volumes and the respective pressures on an estimated basis. The principle, however, was mine rather than his. He did not accede to the principle but the percentages which we ultimately arrived at are very close to those used by the British American Company in their presentation. I forget their exact percentages but they were not far different from ours. They used, - I am speaking now from page "D" of Exhibit 113 "B" and I will quote:

"When compiling these figures the operating costs of the high pressure compressor station were divided between the cost of transmitting gas and the cost of repressuring gas on a basis of estimated throughput, - transmitting gas 42%, repressuring gas 58%."

Now at the time we were discussing it, I believe it was Mr. McCutchin's opinion that we should also take into account the difference or that it would be proper to take into account, I do not think he recommended it necessarily, to take into account the fact that more pressure is required to repressure than merely to transport and without wishing to invade the engineering field, it seemed to me to be reasonable that when one function takes more pressure than the other, the volumes taken by themselves are not indicative of the efforts required and consequently the pressure requirement should be a factor in determining the apportionment of the cost.

Incidentally, this \$12,000 for the G.O.R. is based on the assumption that the G.O.R. gas will pass through the line for possibly the same length of time as



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the British American gas will use the line. If it should be that the Gas & Oil Refineries' gas will not require the use of the line for as long a period, - let us assume for example, it is only going to use the line for three years, you might have to take that special circumstance into account and weigh the cost of the transmission of that gas heavier in proportion to the other.

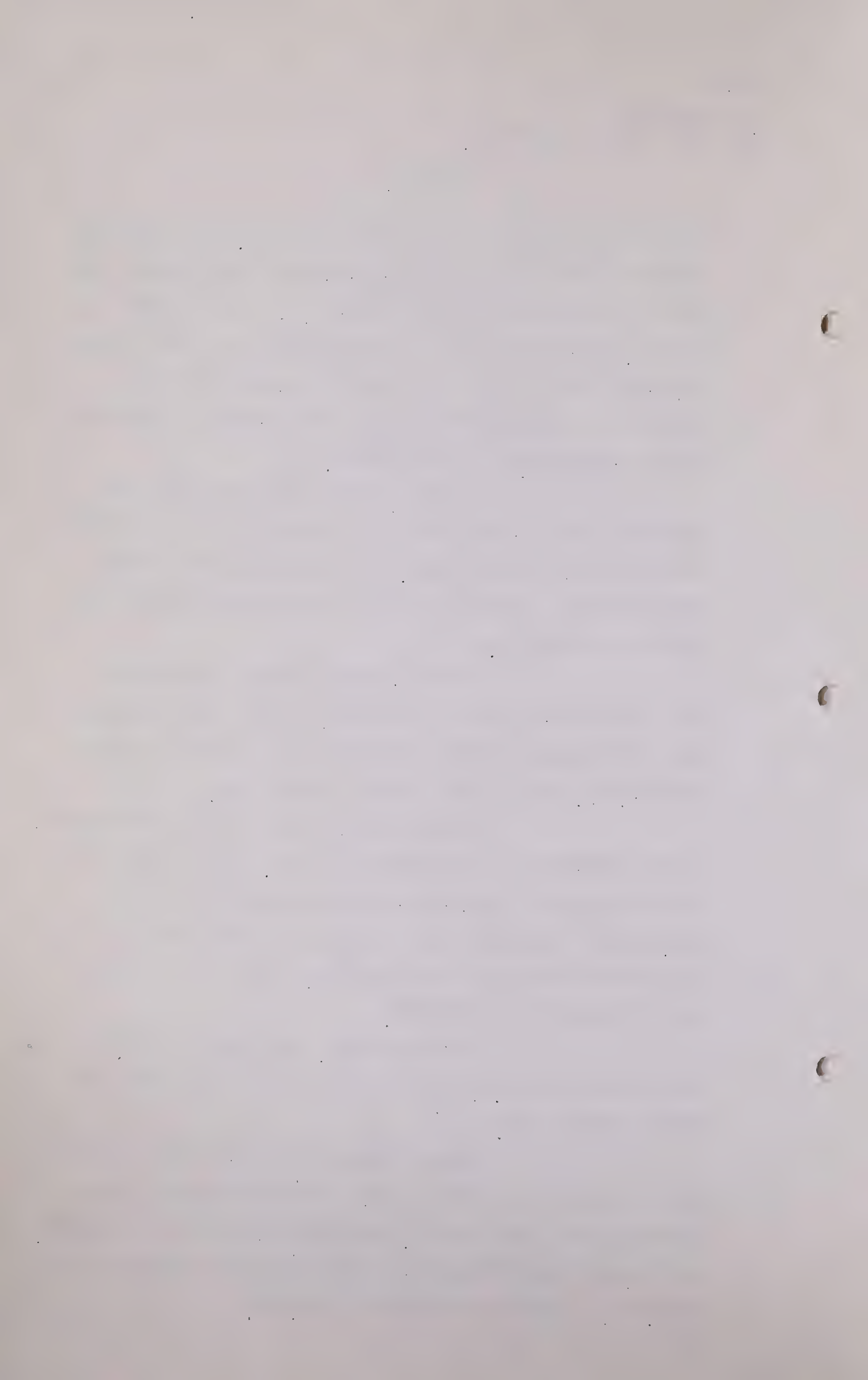
Now then, summarizing the three sets of functional costs in the over-all picture to see the effect of the different approaches, we come back to the little summary which I started to read in error this mornign, at page 46 of Volume 2.

The net over-all annual average cost and I am speaking now of gathering, residue transmission and repressuring, on the British American basis it comes to \$272,463, that is the average annual cost.

In order to reconcile that with basis "B" we add provision for fuel costs of \$921. and we deduct a saving by way of reduction in depreciation charges of \$34,640 and a reduction in the return on investment of \$13,123 to arrive at a net over-all, annual average cost on the basis B-1 of \$219,621.

In other words, basis B-1 is \$52,842 cheaper than the B.A. basis, although the assumed rate of return is the same.

On the alternative basis B-2 prepared on the same basis as for the B-1 but substituting a rate of return of $11\frac{2}{3}$, net 7, per cent for the rate of $15\frac{5}{6}$, net $9\frac{1}{2}$, per cent, results in a net over-all average cost of \$193,037, a further reduction of \$26,584.



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In other words if you switch from B.A. Basis to Basis B-1 and also reduced the rate of return, the total annual average saving would be in the order of \$79,000.00.

The application of the variations suggested in Basis C-1 results in a reduction of the net overall annual cost of \$41,274.00 as compared with the B. A. Basis (without changing the rate of return) summarized as follows:

Net overall annual cost per B.A. basis	\$272,463.00
Add provision for fuel cost	<u>921.00</u>
Total	<u>\$273,384.00</u>

Deduct

Then deduct the savings for
reduction in depreciation of \$32,967.00

And for savings due to the reduction in the return on investment	<u>9,228.00</u>	42,195.00
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Then arriving at the net overall annual cost of Basis C-1 of	<u>\$231,189.00</u>
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That again is without changing the rate of return.

Alternative Basis C-2 prepared on the same basis as for C-1 but substituting a rate of return of $11 \frac{2}{3}$ (net) 7% for a rate of $15 \frac{5}{6}$ (net $9 \frac{1}{2}$)% results in a net overall average cost of \$202,000.00, a further reduction of \$29,189.00.

In other words Basis C-2 is approximately \$70,000.00 cheaper than the original B.A. basis.

For comparative purposes we now show a tabulation showing the total average cost of performing the various functions of gathering, residue transmission and repressuring. I do not know that I need to read that into the record.

THE CHAIRMAN: I do not know.

A And following that we present a table of unit cost by functions of gathering, repressuring and residue transmission and we show

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also the average rateable volumes which were assumed for the purpose of arriving at these unit costs.

Q MR. McDONALD: Are those annual average costs ?

A Average annual rateable volumes.

Q For a four year period ?

A Yes. The whole discussion relating to rateable volumes is contained in Section 4 and it takes some time to go through that. As I suggested it could be postponed until another time. Our comments respecting fuel costs are contained in Section 5 and the principle recommended with regard to depreciation are contained in Section 6, and some of the points we have discussed this morning are predicated on principles enunciated in those Sections.

Q MR. BLANCHARD: Did we deal with the working capital item. I think that is treated in the same way as you treat the Madison ?

A Yes we introduced that yesterday, sir.

THE CHAIRMAN: And these figures on Page 48 represent the price of gas at the inlet to the scrubbing plant according to whichever basis is used ?

A That is correct.

Q Assuming the volume.....

A And assuming that there are other contributors.

Q MR. BLANCHARD: I notice that in your estimate you have adopted the total annual administration total of \$15,000.00 ?

A Yes sir.

Q And that charge in the British American administration is a flat charge being made by British American Oil Company Limited to the British American Gas Utility ?

A I took the \$15,000.00 at the moment to be an estimate of what

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a charge will be. My understanding from Mr. Donellan, who can confirm if I am right or not, was that at the end of the year British American would compute its total overhead cost in its head office and apportion that out amongst its various activities and our charge to the British American Utilities Company would be apportioned as a percentage of the total administering expense and would be on the order of \$15,000.00.

Q What is your opinion of the propriety of that method of charging ?

A I have two suggestions there sir. First I am not in accord with the principle of a figure which represents an apportionment of the total head office expense. I believe it would be more appropriate for the parent company to bill the subsidiary with specific amounts for specific things. For example, to bill them so much for the cost of the annual audit, so much for legal expenses that have been incurred, so much for long distance telephone expense, so much for a portion of the local management, where the management function is split between two departments of the company, and so on. The purpose being of course that the Board would be in a position as other parties at subsequent hearings, in a position to come to some conclusion themselves as to the reasonableness or otherwise of the cost of certain things that have been done and are included in what otherwise would be a flat charge.

Q That is the basis adopted by Madison in its submission is it ?

A Yes sir.

Q There is no flat charge made by the parent company in the Madison submission ?

A That is right.

Q And you think for the sake of consistency, they should both be

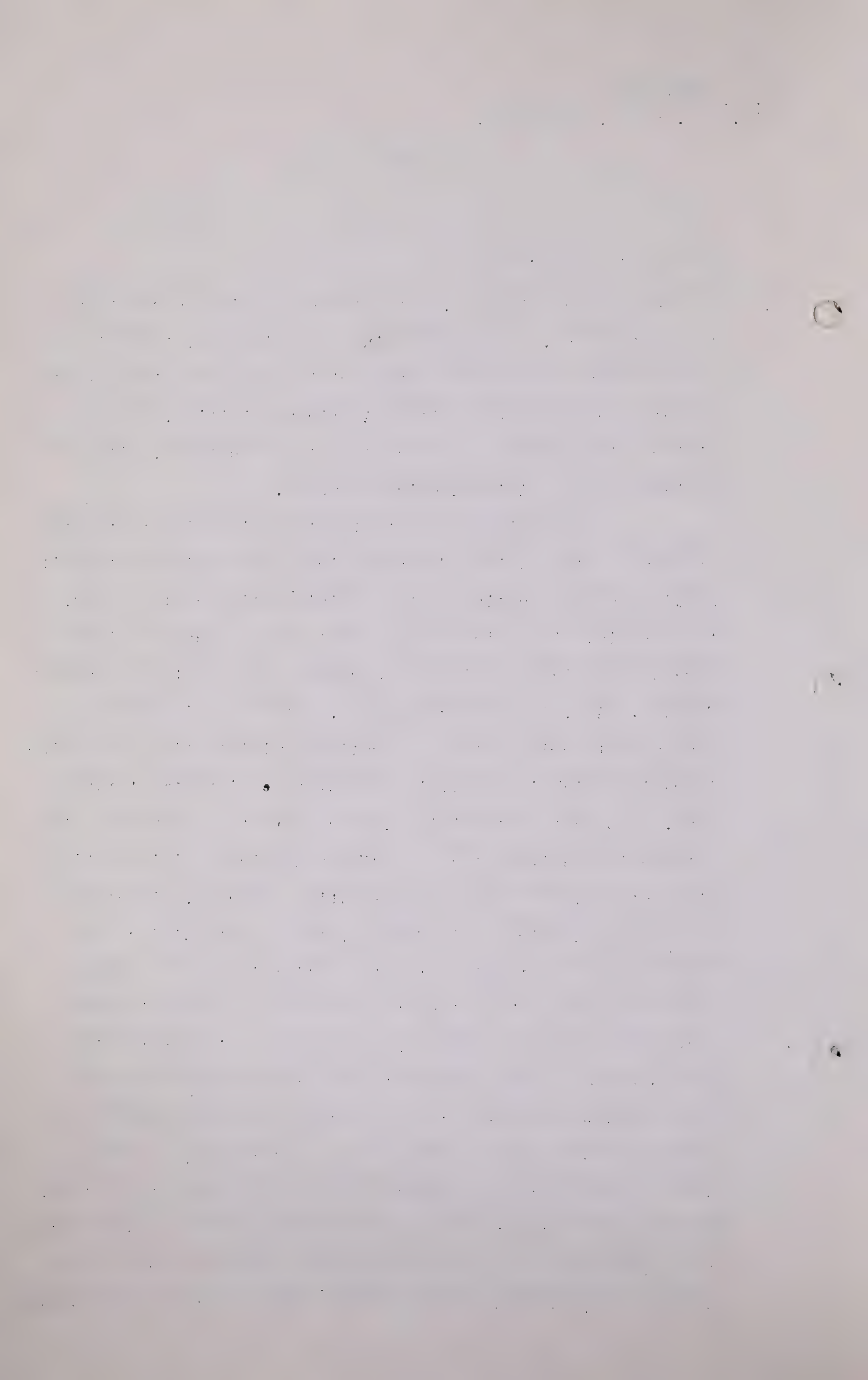
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treated in the same way ?

- A Not only for consistency, but I think that is the right way to do it anyway. The other point I had in mind, the method I understand as proposed by the British American will have the effect of charging the British American Utilities, the subsidiary with a share of the cost of the executives, with the offices of the British American Company.

In the first place that method will differ from the proposal of the Madison Company which does not intend that it should bear any portion of the administrative costs of say, the Imperial Oil offices in the east except such functions as purchasing which are direct and closely related to the Madison Company. And, in the second place, I think it is proper to draw a distinction between operating administration and administration which is purely in the nature of investment management. The fact that British American happens to own the entire outstanding capital stock of British American Utilities Limited will naturally mean that the executive officers, directors of the British American Oil Company, the parent, will be concerned from time to time with the activities of the company which represent its investment and will be spending some time and thought and no doubt some expense in considering the problems of that company in just the same manner as any of us concern ourselves in the activities of any company in which we perhaps have a small share or interest, but that cost of supervising or worrying about investments is an inescapable responsibility of any shareholder and not a case which in my view should be transferred to the shareholders of the company in which the shares are held any more than I can charge



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the Commoil Oil Company in Turner Valley with the cost of my worrying about whether the investment is being properly handled.

Q And another thing I would ask you to make some comment on is costs of administration and interest during construction. My understanding is that this costs of administration are based on 10% charge for administration and 4% per annum, a 4% interest during construction, making a total of 14%. Am I correct in that ?

A Speaking now about the overhead cost included in the construction cost of 1944 - 1945 installation. There has been added the 10% of which you speak and there has been added an amount for interest which was computed on an estimated time basis, but does in fact work out to approximately 4% of the total value of construction, but it was not based on a 4% rate. I do not think that, but it works out to 4%.

Q How does that compare with Mr. Hill's appraisal in connection with the Madison ?

A For a proper understanding of the relationship of those two charges I think it is necessary...

Q Page 23 of 69 is it ?

A It is necessary to consider.

Q Page 13 ?

A To consider what Mr. Hill did. I think this is Exhibit 69. Mr. Hill's report is.

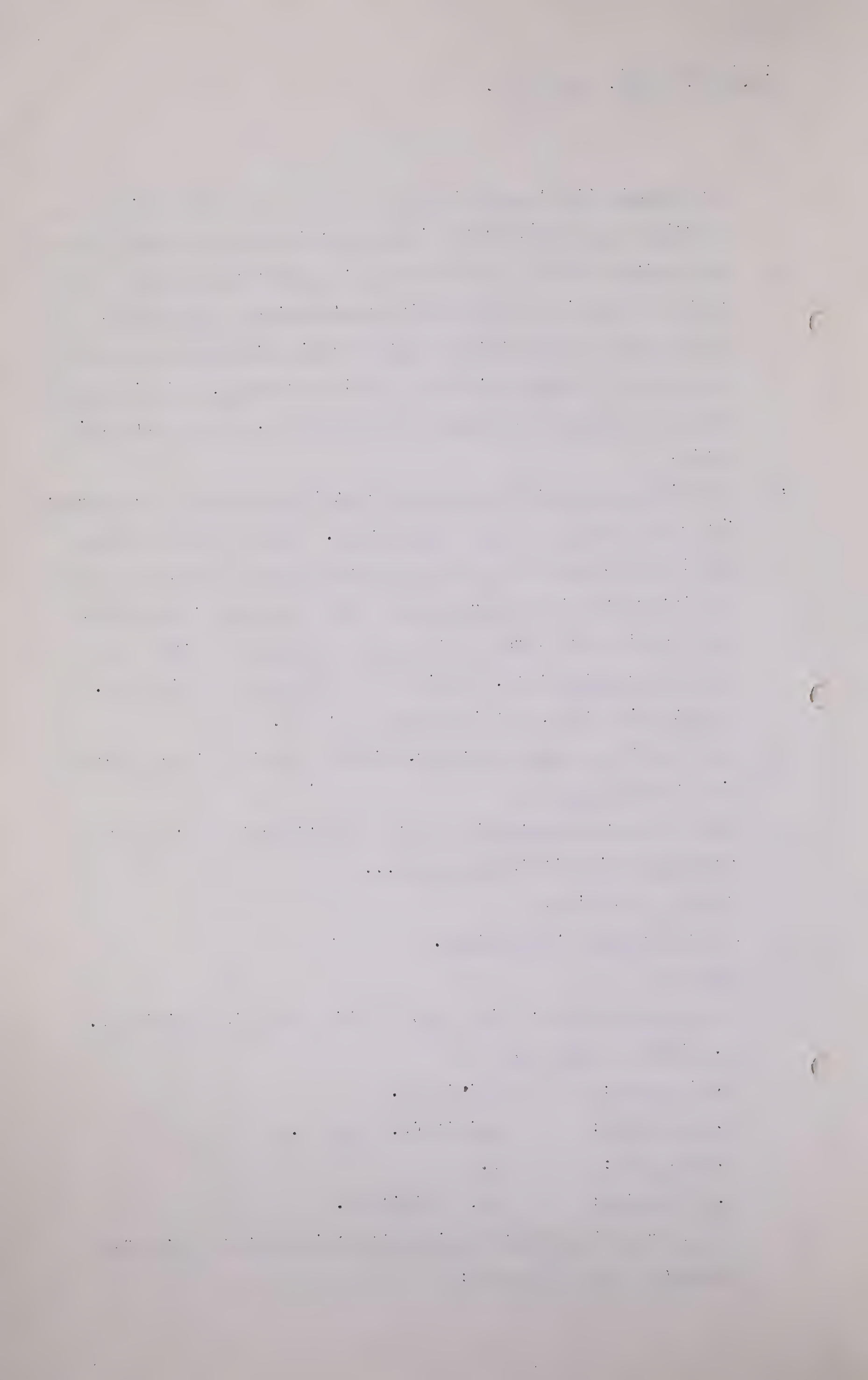
MR. CHAMBERS: Exhibit 59.

MR. BLANCHARD: Exhibit 69, Page 13.

MR. CHAMBERS: 59.

MR. BLANCHARD: Yes, Exhibit 59.

A I read from his report dealing with this matter of general overhead costs as follows:



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"As previously stated herein, general overhead costs, unavoidable in the construction of a property of this nature, have not been included in the unit prices for equipment, materials or labour. These general overhead costs include:

Administration during Construction

Legal expenses during Construction

Engineering and Supervision during Construction

Interest during construction

Insurance and Taxes during Construction

Damages in excess of Insurance during Construction.

It has been the practice of the Company in the past not to capitalize such costs except that in some cases salaries of draftsmen and field engineers were capitalized. Book costs of construction therefore do not reflect them except to a very minor extent.

To construct a property of the kind and size of that herein under discussion in a year's time, will require the full time of a general manager, a field superintendent and a field supervisory and accounting organization, set up for that purpose. The costs of such an administrative organization in a job of this size generally amount to about two per cent of its cost, including salaries and expenses."

So that is 2% of its total needs for administration and it covers a general manager, a field superintendent, and a field supervisory and accounting organization set up for that purpose.

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"The overall costs of engineering design and supervision would normally be equivalent to a minimum of three per cent."

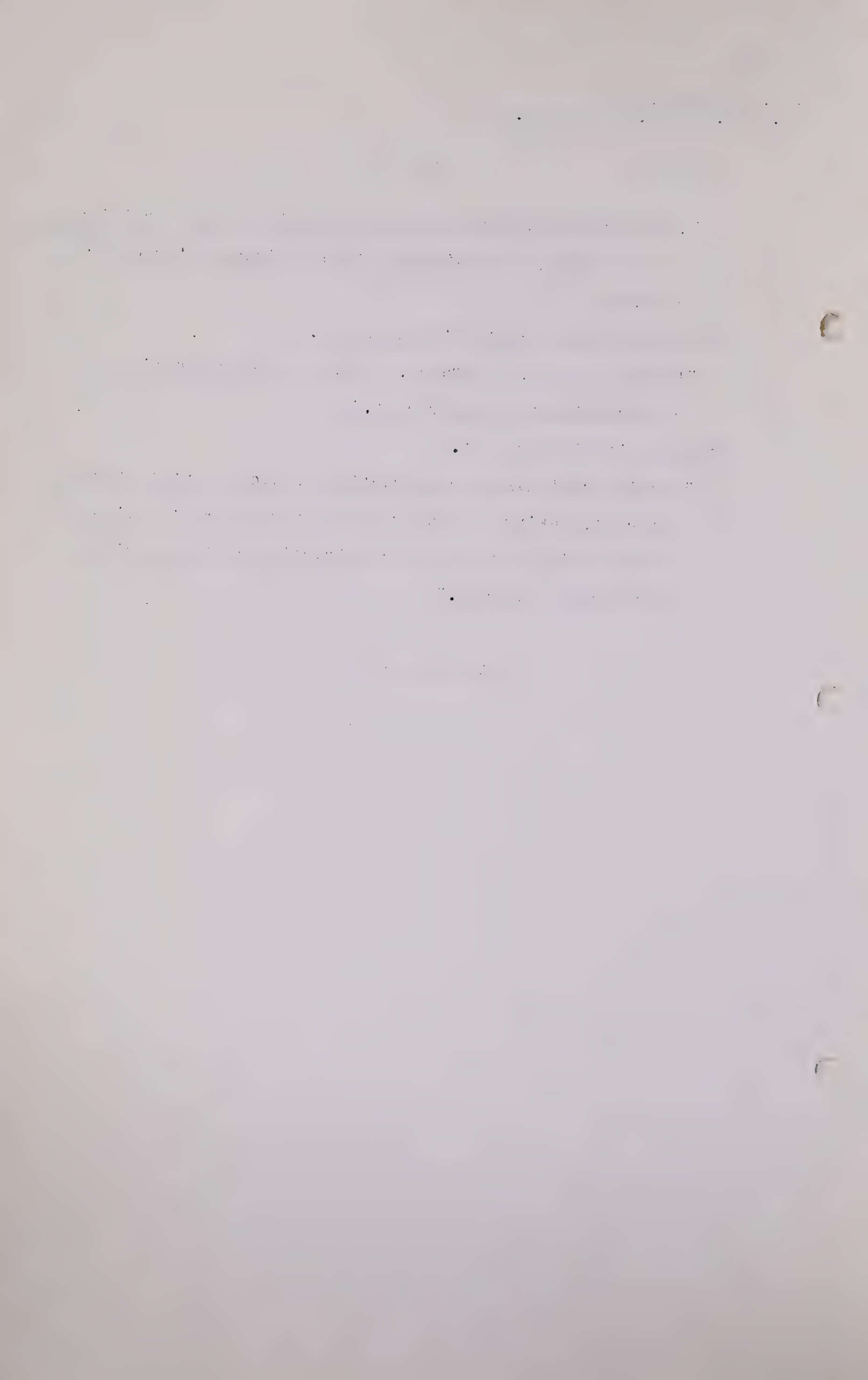
That makes five per cent altogether now.

"Legal services, insurance, taxes and damages during construction to one per cent,"

That makes it six per cent.

"and interest during construction would amount to three per cent, making a total general overhead cost equivalent to nine per cent of construction costs exclusive of general overheads."

(Go to Page 4677)



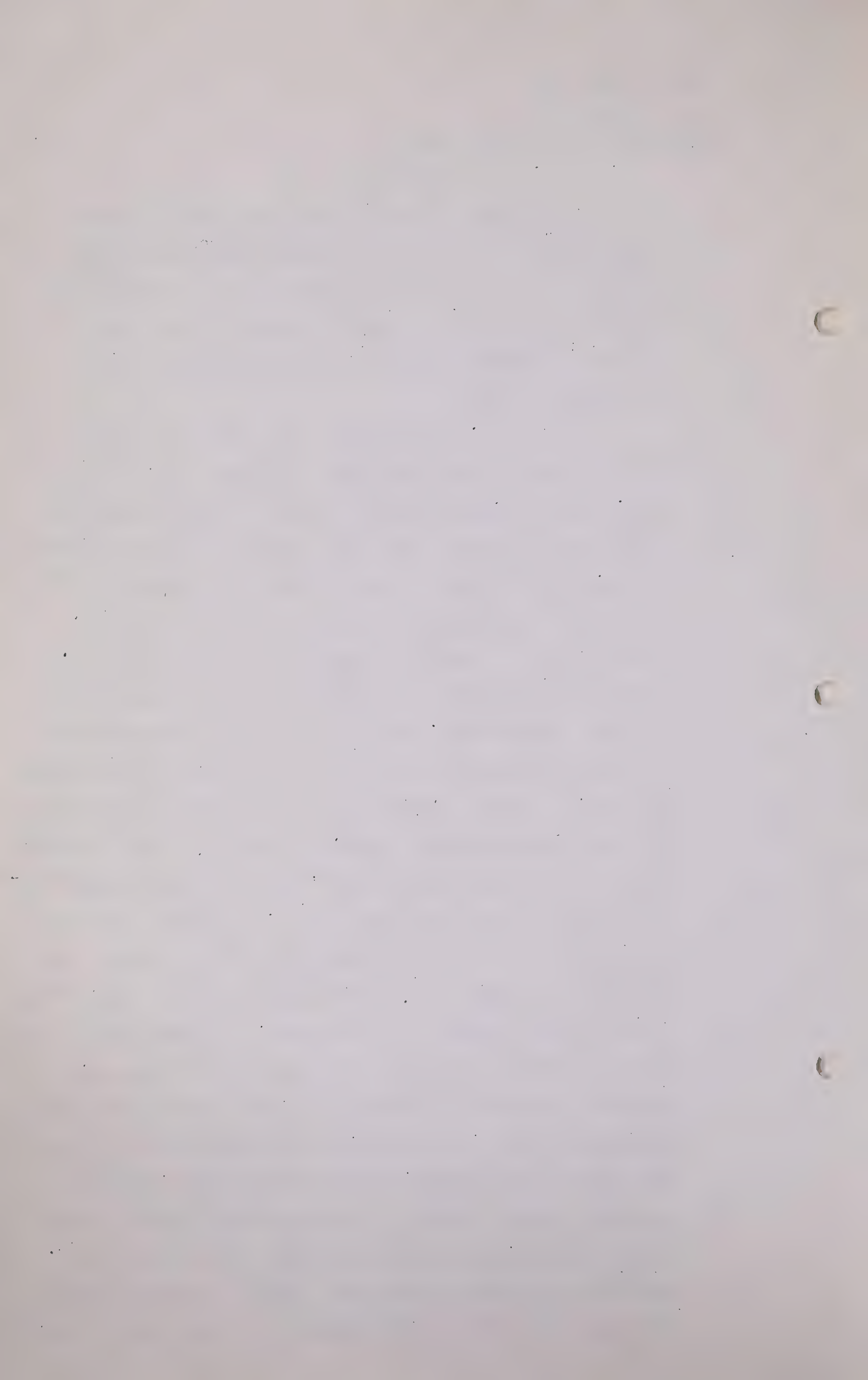
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"This low overhead cost presupposes a parent organization able to assign competent men to the work without the necessity of shopping around for them, and possessing sufficient credit to permit the new project to secure its construction funds without going to the financial market."

Now, in addition to this 9% of Mr.Hills's, who, of course, also included a provision for the transportation of workmen and for the use of the construction tools, and I believe that some elements of cost are already included in the direct costs of the British American. There are two circumstances there which appeal to me. First of all, Hill's 9% includes all the elements of overhead and interest. The British American method is to provide 10% for the elements of overhead, exclusive of interest, and then 4%, so that the comparison is as between 14% and 9. Further than that, from my cursory examination of the vouchers and the records, relating to this construction work performed in 1944 and '45, it seems apparent that a good many of the elements of cost which would have been considered in Mr. Hill's classification as overhead, are included as elements of direct costs, so that if they have already been provided for as elements of direct cost, there is no necessity to provide for them again as overhead. Further than that, of course, the fact that they are only provided for twice on Mr.Hill's classification, but also the overhead is allowed on items of overhead charges. In other words, a certain element of cost, which in Mr. Hill's presentation would be included as overhead, is included in the British American classification as direct, and then there is overhead allowed on it, so that it is



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not only allowed twice, but the rate of overhead is allowed in addition.

Q MR.BLANCHARD: Would a fair example of that be the salaries of Mr. McCutchin, Mr.Taylor, Mr. Sherry and Mr. Cull of the office staff?

A Yes.

Q Those are charged as direct costs to begin with?

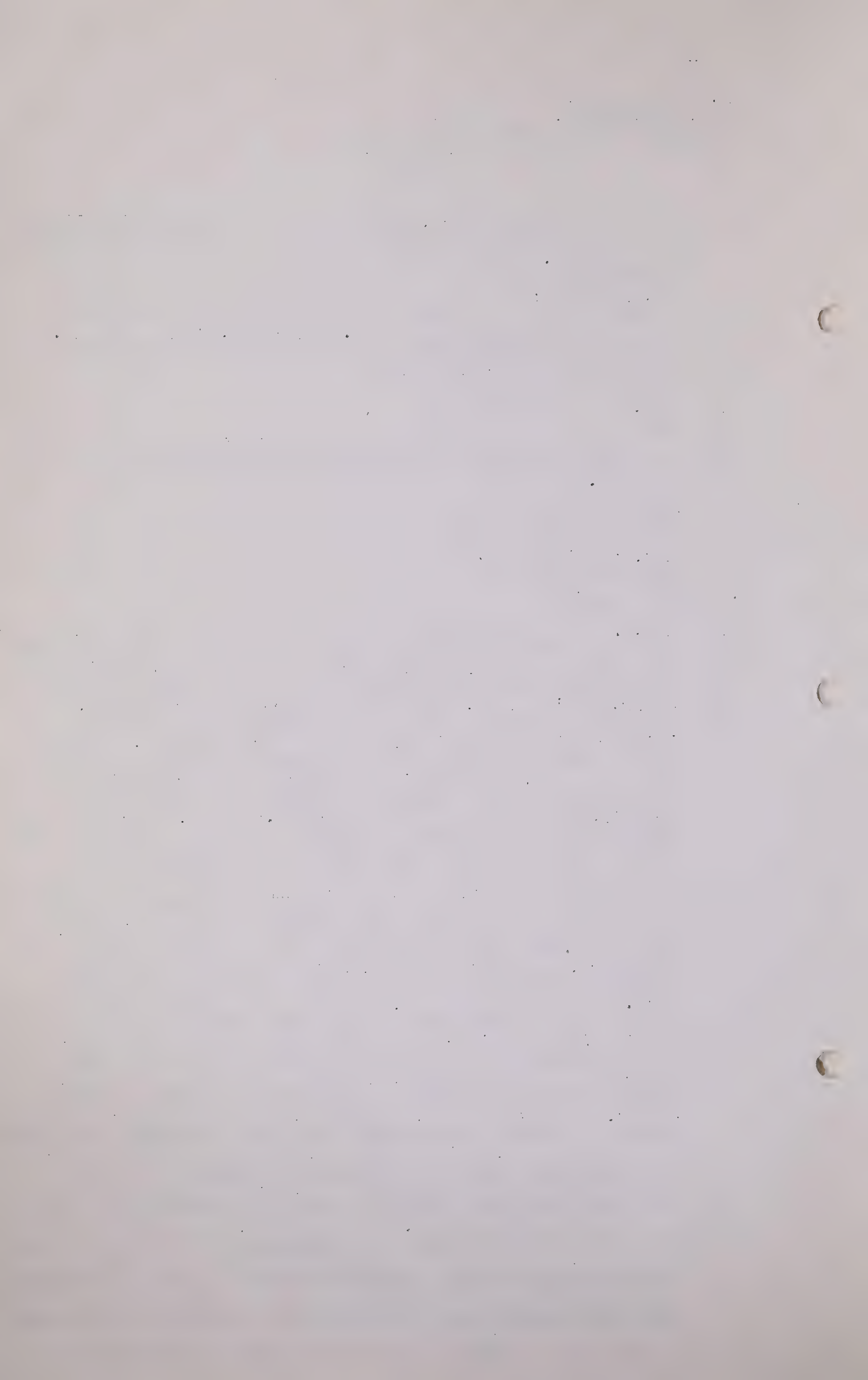
A Yes sir.

Q And then there is 10% on their salaries?

A Yes, and interest.

Q And interest?

A Yes. And those are things which in my view plainly come within the definition of administration during construction on Mr.Hill's basis. If you will recall the reference, "Will require the full time of a general manager, a field superintendent and a field supervisory and accounting organization, set up for the purpose." Then, of course, too, it is a fact that no doubt from what Mr. Hill says here and also said in evidence, he was impressed with the fact that this was a plant constructed by the company itself, therefore, entailing a considerable amount of overhead cost. On the other hand, a very large proportion of the British American '44-'45 construction was done by a sub-contractor or by contract, I should say, rather. Gentry, Joncas, Hislop, Boise, and so on, were contractors employed by the Company. And it is generally recognized that overhead associated with contract work, is substantially less than direct construction. For example, in the case of the recent re-negotiation agreements worked out by the Dominion Government on Dominion War contracts, they allow a difference on the order of four to one. They allow a contractor a



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profit of X% in a given case for the work which he himself performs, but they will allow one-quarter of X on his element of profit on work which he contracted out.

Q That is all thanks.

.....

CROSS-EXAMINATION BY MR. CHAMBERS

Q Mr. Hamilton, have you got Exhibit 79 in front of you, that was Madison M-9, and I have not got it here.

(Exhibit in question handed to witness).

Q Would you mind turning to Schedule M-9-B-22?

A Yes sir.

Q And that is a breakdown of the estimated administrative expenses of the Madison for the years '44 to '48 inclusive?

A Yes sir.

Q Which figures have been taken into consideration in the other statement for the purpose of estimated operating expenses?

A Yes sir.

Q And included as part of the estimated administrative and general expenses, under Item 19 as rate hearing expenses?

A Yes sir.

Q Totalling \$50,000.00?

A Yes sir.

Q And the point I want to make is this, that included in the Madison's estimate of administrative expenses, which appear in the accounts, is an estimated amount to take care of the rate hearing?

A Yes sir.

Q And the total figures for each of the years '44 to '48 estimated by Madison for administrative expenses are what?
Would you mind reading them for the purposes of the record,

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please?

A For 1944 \$55,965.10; for 1945 \$49,526.84; for 1946 \$48,743.00; for 1947 \$48,682.05; and for 1948 \$48,621.09.

Q And those amounts included \$6000.00 for rate hearing expenses for 1944; and for each of the other years \$11,000.00, does it not?

A Yes sir.

Q So that for the purposes of comparison of the \$15,000.00 figure asked for by the British American with the figures asked for by Madison, it would be fair or proper, I suggest, to delete from the Madison figures the rate hearing expense figure. Would you agree with that?

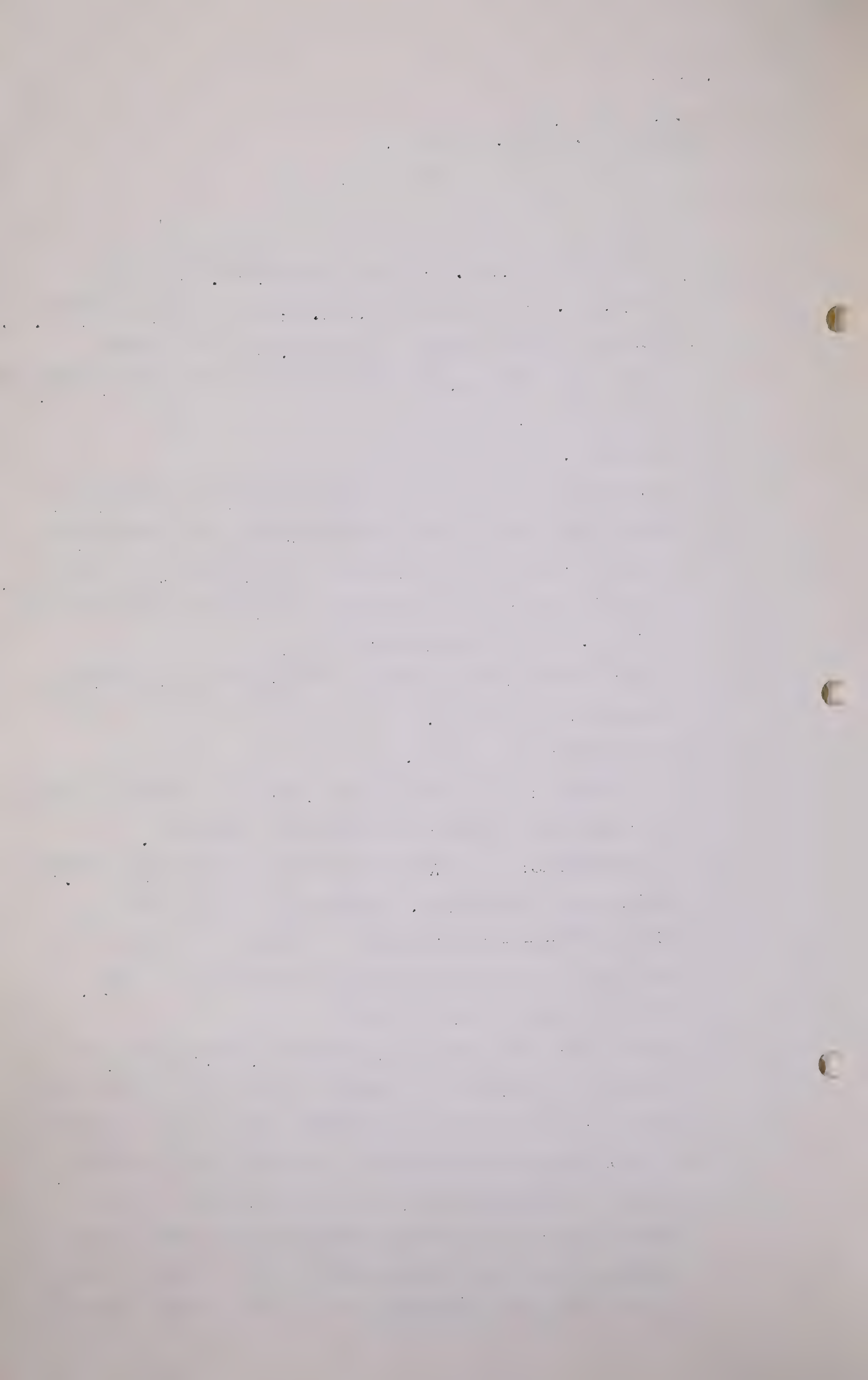
A I just forget now whether the British American figures included that or not.

MR. HARVIE: No.

THE WITNESS: They do not. So that it would be proper for comparison purposes for them to be deleted.

Q MR. CHAMBERS: And here is another thing that Mr. Smith called to my attention. Are there any other items on Schedule M-9-B-22 which should probably be deleted or deducted for the purposes of comparison with the B.A. fifteen thousand dollar figure?

A I have given this matter some thought, Mr. Chambers, and I think the two amounts are relative except for the fact that in the case of the Madison Company, this is what prevented me from coming to any positive conclusion in the matter, or any exact conclusions, was that in addition to the administrative and general expenses of which you are now speaking, there is a substantial cost for Madison in connection with the maintenance of its field office, and there



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is no comparable expense in the case of the British American.

Q I see?

A And I am not quite sure where field office costs stop and where head office costs start.

Q My instructions are that on Schedule M-9-B-22 there is nothing included for field office whatsoever?

A That is correct.

Q But I am trying to compare this fifteen thousand figure that we have been talking about in connection with the B.A., what is the comparable figure with regard to Madison?

A I would say this, that in addition to what you have in M-9-B-22, in order to make it fully comparable, you should also add to this, part of, how much I do not know, but part of the Turner Valley office expense, which would be the sort of thing included in the fifteen thousand.

Q Now, as I understand, the fifteen thousand figure that B.A. has set up for the purposes of this hearing, would not include local office expenses, stationery, and items of that nature, would it, Mr. Hamilton?

A I do not seem to have a copy of that volume, of the B.A. Volume 3, Mr. Chambers.

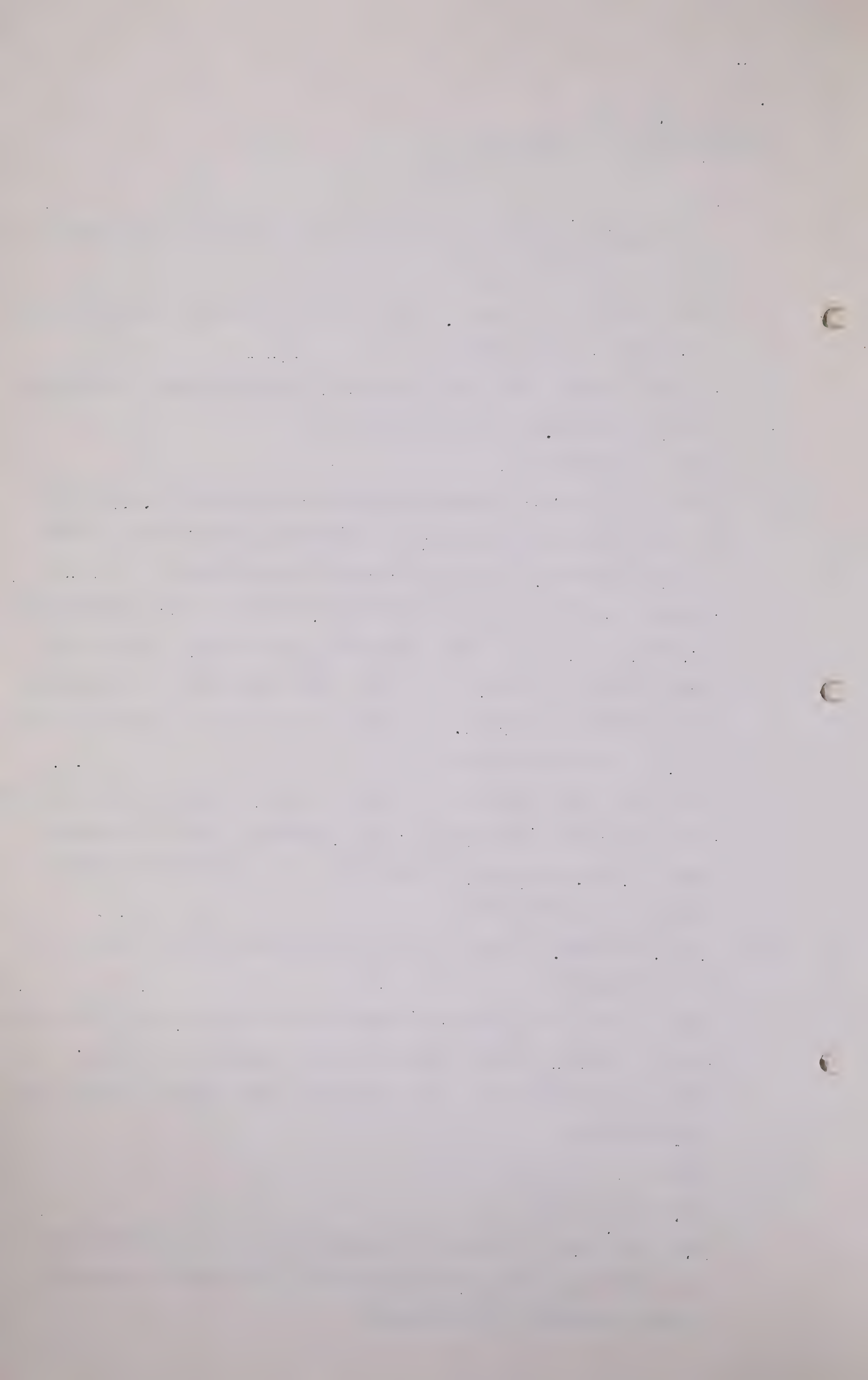
(Copy of volume in question handed to witness by Mr. Blanchard.)

Q Would you mind dealing with the items separately? Taking Schedule M-9-B-22, you will notice it gives various items that are included?

A Yes.

Q You notice that?

A Yes. You asked me about stationery, and I am not quite sure, Mr. Chambers. I do not think it is in the British American fifteen thousand dollar figure.



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MR. STEER: Look on Page 3, Mr. Hamilton.

MR. McDONALD: Yes, on page 3.

MR. CHAMBERS: Of Exhibit 113?

MR. STEER: Yes.

THE WITNESS: I am also looking at Page 2. That is one of the points where the difficulty arises because on page 2 you have office expense of \$8080.00, which I suppose would include the usual things coming under that category, stationery, files, telephone, light and so on.

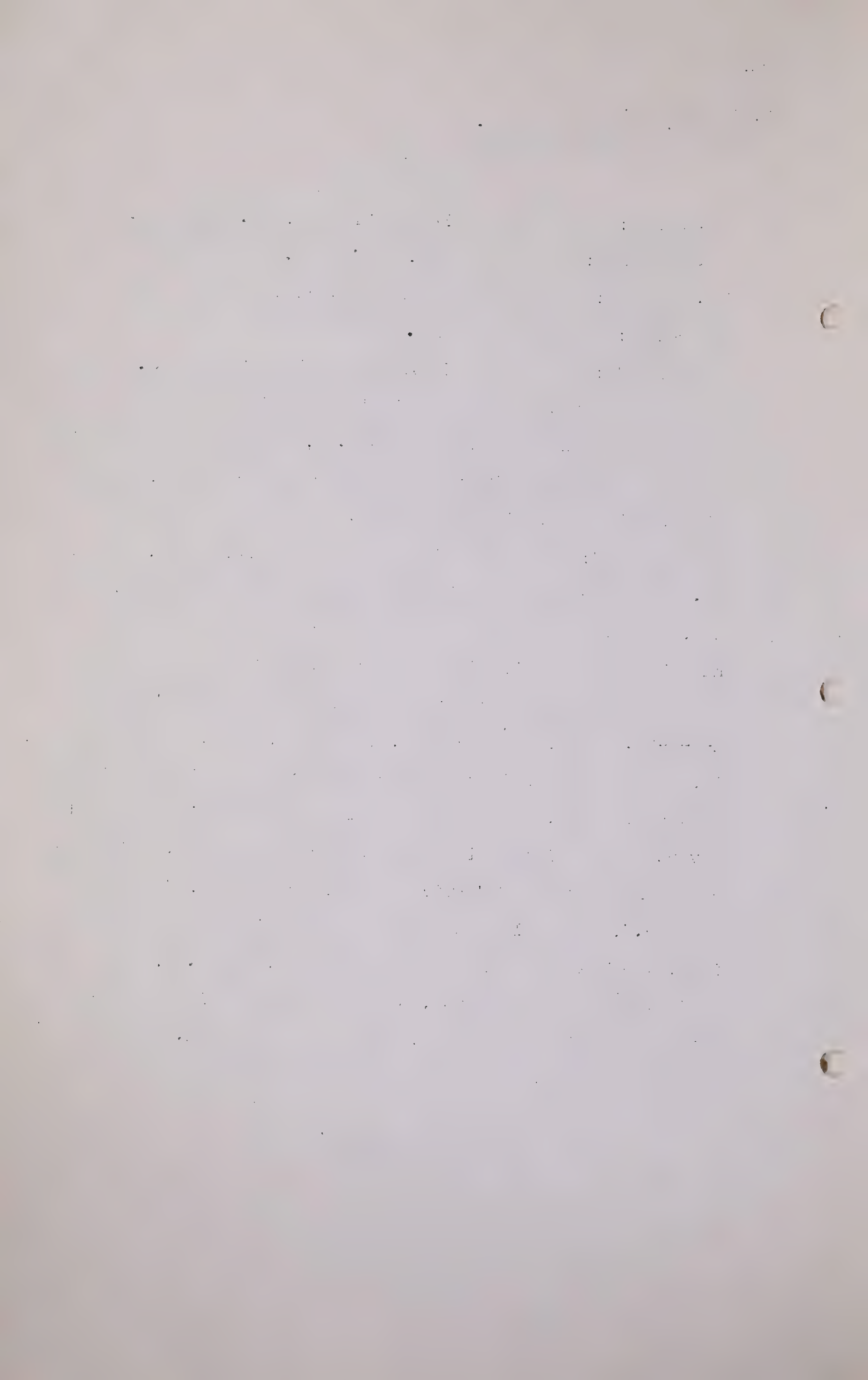
Q MR. CHAMBERS: That is not administrative, is it?

A No. We are dealing now with the question of stationery.

Q Yes, I see?

A And clearly in Madison's there is a cost for the stationery and those supplies used in the Calgary office on Schedule M-9-B-22. Now, the question, I take it, that you are raising, is, is the comparable stationery cost included in the fifteen thousand? Well, by reference to Page 3 it outlines what it covers in the fifteen thousand dollar cost figure. Item (c) reads "Proportion of Services of Calgary Office, Stationery and etc.", but on Page 2 where the operating expenses are summarized, there is an item of office expense, \$8080.00, which if it is to^{be} an annual expense, seems to me must include such things as office stationery, telephone and so on. It can not be just rent.

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Q Take item number 2 of schedule M-9, B-22, Exhibit 79.

The first item is salaries, administrative, that would be comparable to the salaries that are in the \$15,000?

A No, sir.

Q Does the item \$15,000 include all administrative salaries for the British American operation?

A Yes, sir, I would say so.

Q Item 1 in the Madison statement includes all administrative salaries that are included in the Expense statement, does it not?

A Well, what constitutes administrative salaries is different in the two cases I should think, because of the fact that the Madison Company is a larger organization and there is a more clear-cut chain of authority. Some of the work that would be done for example by Mr. McKenzie in connection with the British American operation might very well be done by someone other than the Calgary executive officers in the case of Madison. It might be done by someone out in the field and consequently charged under a different caption in a different schedule.

Q Is there anything included for field operations, field supervision except in this \$15,000?

A There is a charge for field management and supervision of \$7,758 on page 2 of volume 3.

Q That is Exhibit 113.

A I rather doubt whether the distinction drawn by British American between field management and supervision on the one hand and administrative salaries on the other hand is the same distinction as would be drawn in the case of Madison. They may be roughly comparable but I just want to make that qualification, that there would be naturally

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or there should be a difference due to the difference in the size of the organization.

Q As I understand it the \$15,000 annual amount suggested by British American is to cover services and expenses of its Toronto office for supplying those services and incidental expenses that otherwise would have to be spent here, is that right?

A That is right. And in particular a share of the costs that are borne between the company's production department and this subsidiary.

Q On page 3 of Exhibit 113 the \$15,000 does include a proportion of the services of the Calgary office of the British American?

A Yes sir.

Q My own reading of this is - and I would like to know if you differ and why - that the \$15,000 does not include anything for field supervision, does it?

A I do not think it is intended to because they have an item for field management and supervision of \$7,758 on page 2. From a practical point of view it is a question of whether Mr. McKenzie does the same sort of thing for British American Utilities that Mr. Trammell does for Madison; whether their duties are the same.

Q Then take the second item on the Madison statement, repairs to equipment and offices. Does the British American \$15,000 figure include

A I should expect that to be included in the item of office expense on page 2 rather than in the \$15,000.

Q Number 3 of the Madison, Employee Benefits.

A I would expect that to be included in the \$15,000.

Q You would?

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A With respect to the salaries that are included in the \$15,000, yes.

Q Insurance. I take that to be insurance on office equipment and things of that nature.

A Yes, sir.

Q And this \$15,000 would include rent of administrative offices, that is any office required at either Calgary or Toronto of the B.A. would be included in the \$15,000.

A I would expect so but I am still concerned about this \$8000 office expense on page 2.

Q Probably I can follow it up more definitely with Mr. Donellan. We are both speculating.

A Yes.

Q I think you said in your evidence-in-chief this morning, not in these words but probably this is the idea I got, and you tell me whether it is also your view, that these utility companies are not entitled to charge anything in the rate by way of operating expenses or otherwise merely because their shareholders happen to be as they are. That is, whether a shareholder happens to be one shareholder in Toronto or in Calgary or otherwise. Is that your view?

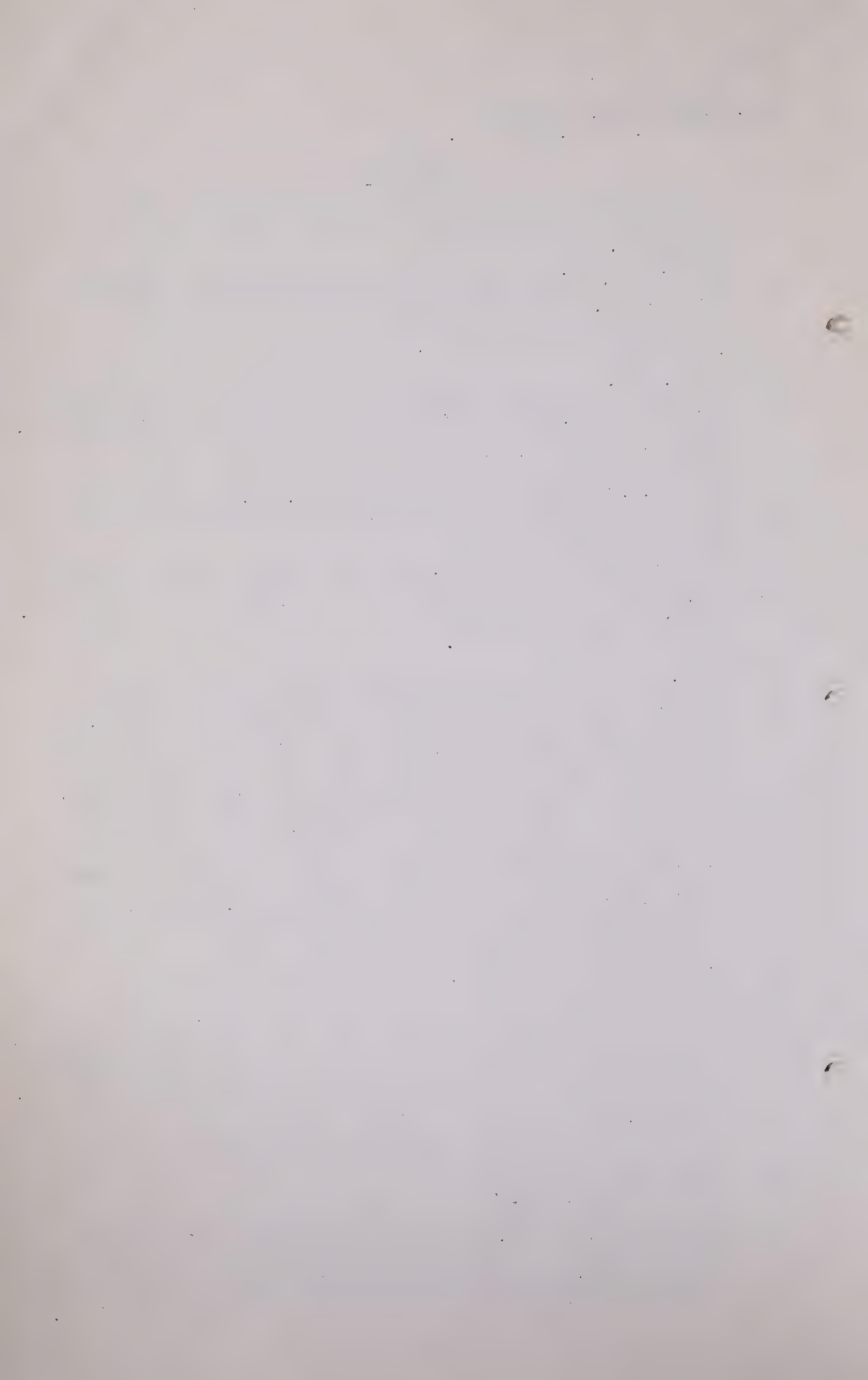
A Yes, with the emphasis on the "merely because".

Q In other words would you agree with this that for the purpose of setting up and treating accounts of these various companies, consideration is not to be taken of the fact that there is one shareholder or one thousand shareholders?

A Substantially, yes.

Q That is all, thanks.

THE CHAIRMAN: Mr. Harvie, through force of habit I started at this end and I should have asked you to go first.



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I will ask you now.

CROSS-EXAMINATION OF THE SAME WITNESS BY MR. HARVIE.

Q Mr. Hamilton, have you made any definite study of the office staff, field staff of the two companies with a view to comparing their what might be classed as field expense, and Head Office expense and administration expense?

A I gave the subject a cursory review and came to the conclusion that the operations and the size were so different that it would be almost impossible to come to any precise appreciation on the subject.

Q Did you go far enough to find just what staff Madison had on the direct payroll by way of their field office?

A Yes.

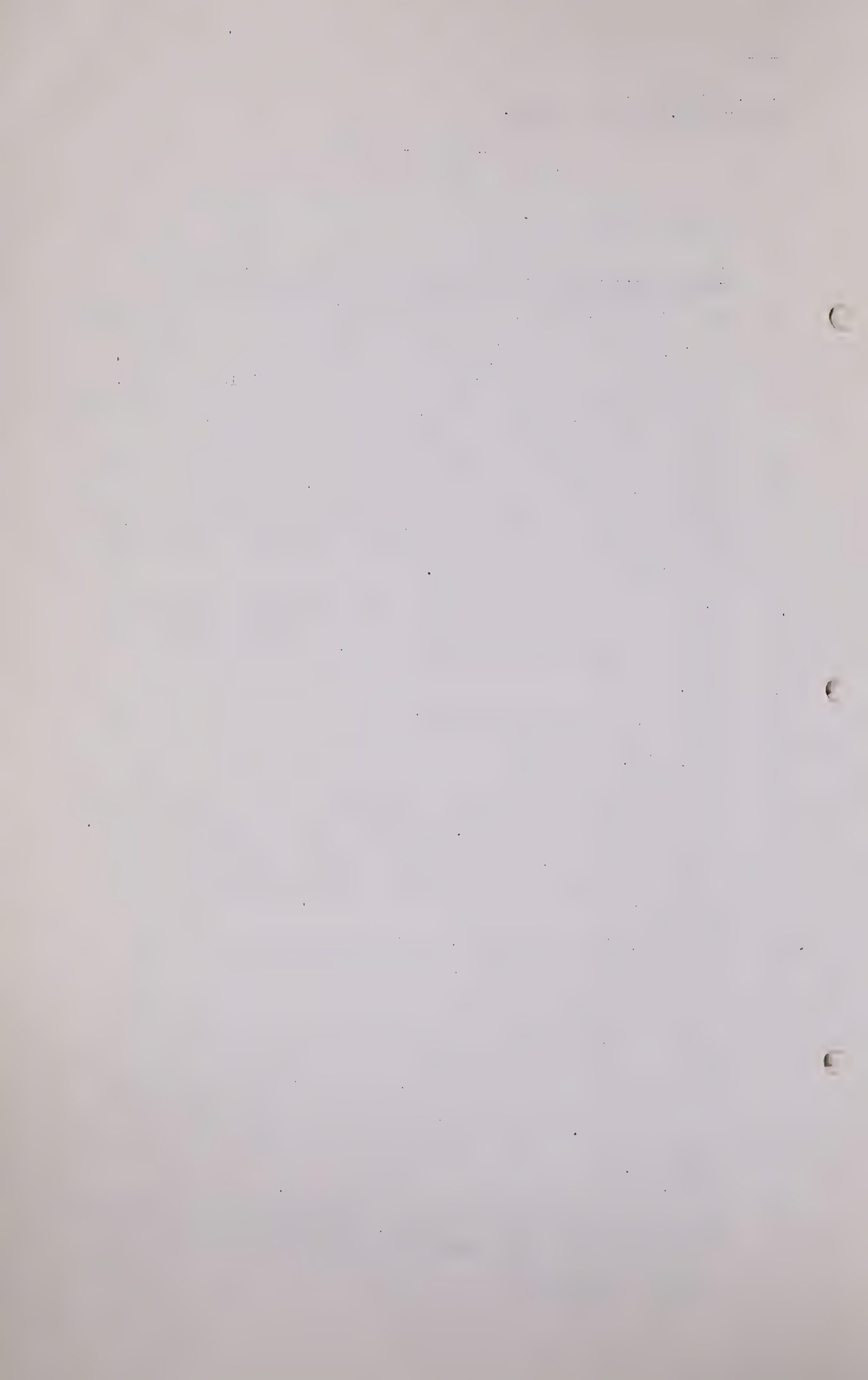
Q And of their Calgary office?

A Yes, sir.

Q You mentioned Mr. Trammell for instance, and suggested you did not know whether Mr. McKenzie gave the same services. Is Mr. Trammell's salary on the direct payroll of the Madison?

A No, sir, just a portion. I am not certain who is his direct employer. His time is spent partly in Madison and partly in Royalite and each company bears its due share of the cost of his services, depending on the amount of time that he spends on each company's operations from time to time. Which is the primary employer I am not certain.

Q So there is a direct charge in Madison's operating expenses for that part of Mr. Trammell's time that he devotes to Madison business?



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A Yes sir.

Q Do you recollect the evidence of Mr. Donellan, where he stated that that was not the case in connection with Mr. McKenzie or his predecessor?

A As I understood it the persons you mention are to be included in this \$15,000 estimate.

Q In the \$15,000?

A Yes, sir.

Q No part of that is in the direct charges?

A In the direct charges for operations?

Q Yes.

A No.

Q As I understand it, Madison has a field office.

A Yes, sir.

Q All the expenses of that field office are a direct charge to Madison's operating?

A Yes, sir.

Q Do you know the amount?

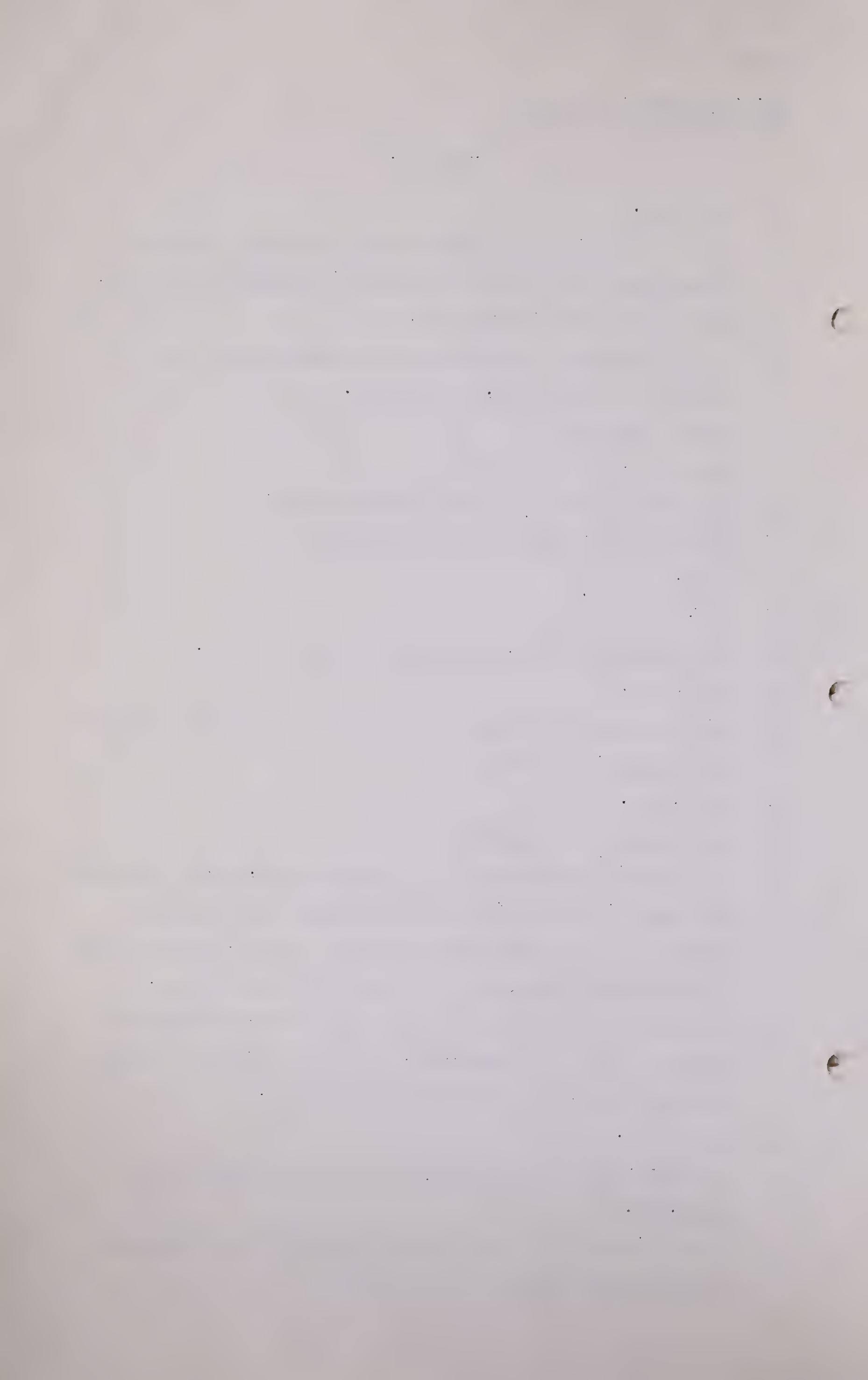
A In 1945 it was estimated to amount to \$29,350.47, including depreciation on equipment and including return on the investment associated with the field office. Amounting to approximately \$500 and \$1000 each, or respectively.

Q It would be possibly some place about \$28,000 including those two items in M-9-A/44. I notice there is a charge of about \$23,700 as head office expenses.

A Yes, sir.

Q And M-9-B/22 there is a charge for administration of \$49,526.84.

A Which includes the head office figure you just spoke of, that is clear is it not, Mr. Harvie?



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Q It does include that?

A It includes the \$23,000 you just spoke of, yes.

Q I wonder if you would be good enough to look at M-9-A/44.

A Yes sir.

Q And in column 1 is the summary of that cost of services department, etc. and an item of \$23,755.

A \$775. for head office, yes sir.

Q For head office?

A Yes, sir.

Q And field office, \$27,418?

A Yes, sir.

Q And administrative and general expense, \$55,965 and if you take the \$6000 off for estimate of cost of inquiry, it would be about \$49,000.

A That is not an administrative and general expense of \$55,000 because the \$55,000 includes the whole of the \$23,775 for head office. There is a primary classification of head office, \$23,775.

Q So this administrative and general expense would be \$55,000 less \$23,000, is that right, or \$32,000.

A Yes, sir.

Q And taking off the \$6000, the amount would be down to \$26,000. That is the \$6000 in the estimate for cost of inquiry.

A I would say that you could strike out the head office expense of \$23,775 because it is included in the \$55,965.10.

Q \$55,000 plus \$23,000 would be

A No, plus \$27,000.

Q Plus \$27,000, yes.

A And minus the Hearing expense, yes.

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Q So it would come to approximately \$76,000.

A Yes.

Q Now in the B.A. figures there is a charge of \$15,000 for administration.

A Yes, sir.

Q And \$7,758 for management and supervision?

A Yes.

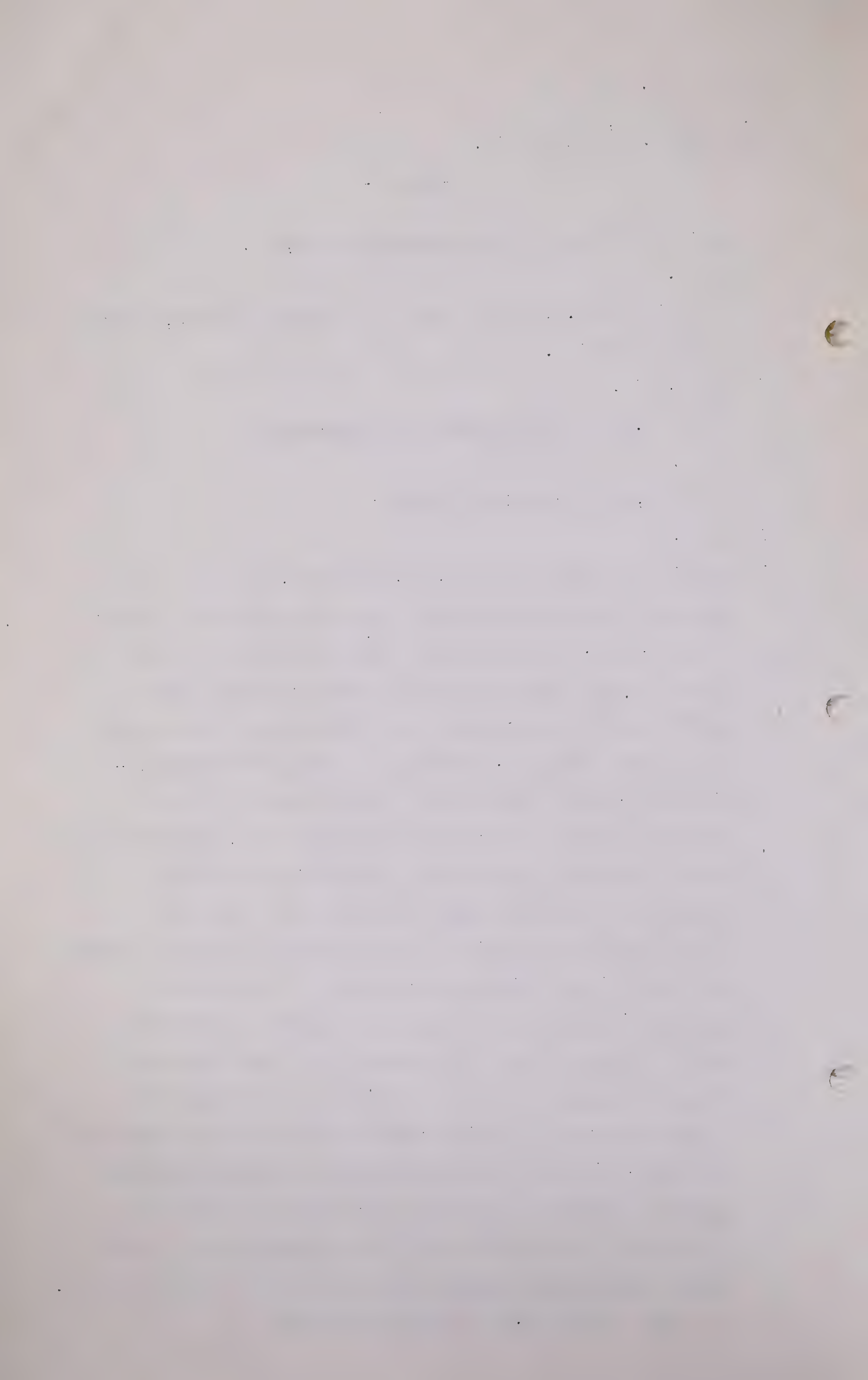
Q And \$8,080 for office expenses?

A Yes.

Q I will not take time now, Mr. Hamilton, but would it be possible for you to prepare a statement analyzing these?

A I have, sir. I spent several hours trying to work out something on that basis and the only conclusion that I could come to was that the administration in the case of the Madison Company, excluding the Calgary expenses, - pardon me, - the field office expenses, worked out at 59 thousand on a five-year basis, pardon me, any conclusions that you come to involve some assumptions as to the comparability of the administrative element and the relationship thereto in the case of Madison of the functions performed in the field office, but I did work out a calculation which showed that the direct administrative cost of Madison was on the order of 13 cents of every dollar of operating costs, as compared to 22 cents of every dollar of operating costs in the case of the British American, if you treat their items of office expenses and general expenses as not being administrative but being operative, or 47 cents out of every dollar if you include office expenses and general expenses as being administrative.

Q 47 cents for the B.A. as against Madison's?



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A 13 cents for Madison as against 22 cents or 47 cents for British American, depending on either of the two bases which you adopt but I do not feel the results are conclusive because I do not think they are comparable and also the operations are different in size, and that is one reason which inclines me to think that the \$15,000 flat fee is an improper way of doing it because there is no way of testing its validity.

Q So you are not able to make any useful comparison of operating costs, which you say would be reliable.

A They were useful to me, sir, but I hesitate to urge them upon someone else.

Q In connection with the administrative, construction costs and general overhead, is it usual to charge the same percentage for a large contract as for a small contract?

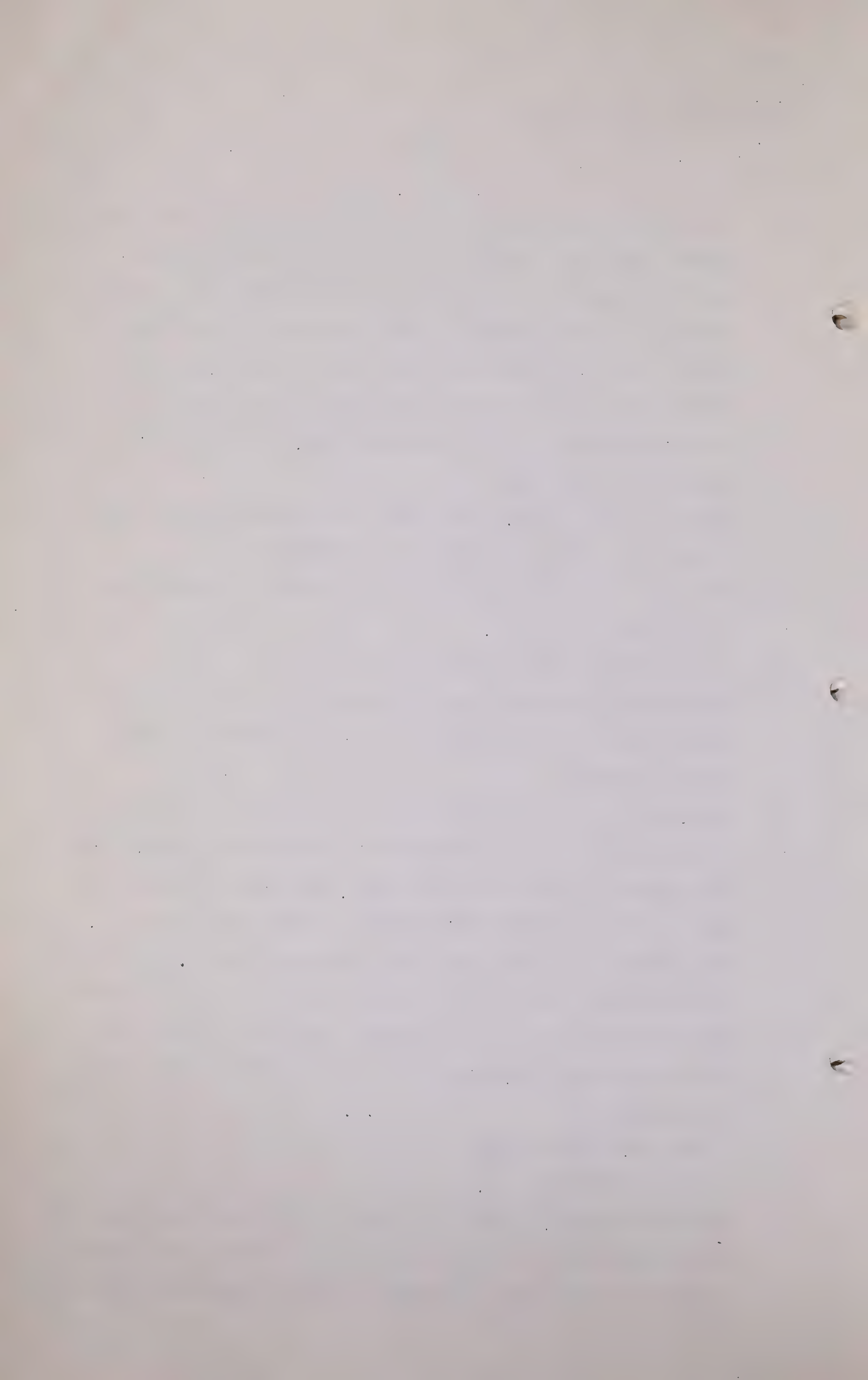
A Usually the size of the contract is taken into account and I would think that the smaller the contract the greater the percentage of administrative costs that would be incurred, that is if the work is done by the concern itself.

Q Mr. Hamilton, in your statement which was filed as Exhibit 125, I believe you read into the record that part of the statement dealing directly with Madison but that you have not read in that part dealing with B.A., starting at the bottom of page 7.

A I can read that in now.

Q I wish you would.

A This memorandum of which Mr. Harvey speaks is a presentation with respect to the propriety of one or other of the various methods of rate base determination and our comments regarding



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the British American follows those with respect to Madison and reads as follows:

Turning now to British American.

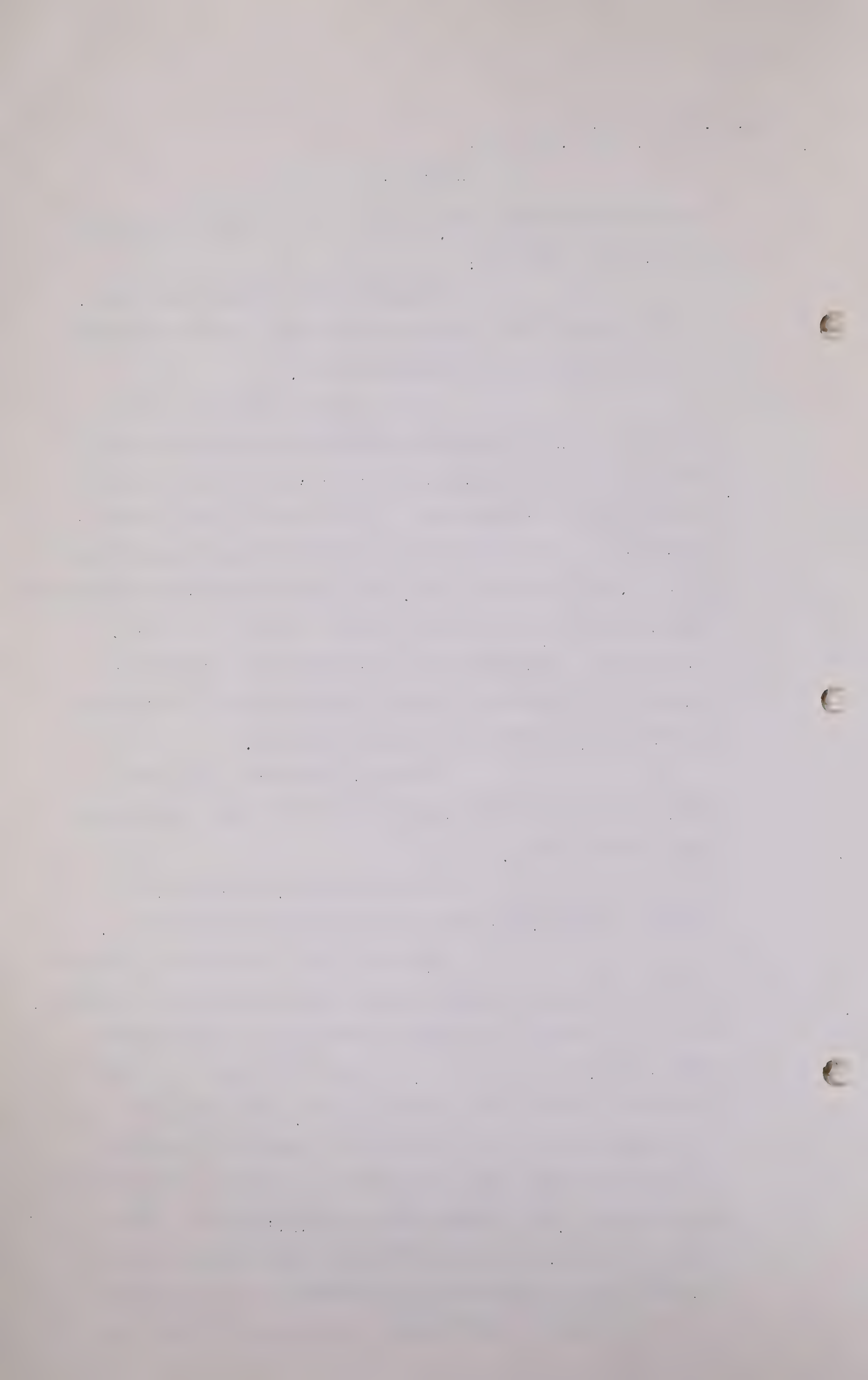
We have first of all the question of the old high pressure gathering lines and the water system.

In my opinion the cost basis subject to accrued throughput depreciation is more satisfactory than the appraisal basis for the reasons outlined in connection with Madison. I have however one specific objection to the mechanics of computing the observed depreciation. You will recall Mr. Ties applied observed depreciation, but applied it only to the tangible elements of cost. I feel bound to say that such a treatment is directly at variance with anything I have ever encountered, either in my reading, my experience or my judgment.

However, I consider cost less accrued throughput depreciation to be the more appropriate base in any event.

In which case, of course, the observed depreciation does not enter into the picture.

As in the case of Madison I consider that due allowance should be made for construction overhead, and I would suggest the same percentage allowance should obtain for both companies. I should here point out that I have never had the opportunity to check the detail of expenditures against the expenditure records or against the plant records. The information I have was obtained from Mr. Donellan. The records are in B.A.'s office in the East, and I rather doubt whether the time and expense involved would be warranted particularly as the results would be somewhat inconclusive, not wanting to audit the



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whole of the B.A. Company's operations for ten years.

With regard to 1944 expenditure, I believe most of the points I might offer here were covered in Mr. Blanchard's examination of Mr. Donellan. I consider, however, that particular attention should be given to the reasonableness of the 10% overhead claimed in addition to approximately 4% for interest during construction.

My examination of the expenditure vouchers together with Mr. Donellan's evidence under cross-examination would incline me to the view that substantial parts of the costs that would ordinarily be covered in a general overhead allowance (and were apparently included in Mr. Hill's 9% allowance) are already included as direct costs expended through the Calgary office.

Q MR. HARVIE: Now you suggest there, Mr. Hamilton, that the same overhead allowance be applied in both cases?

A Yes.

Q And as I understand it, Mr. Hills' overhead allowance percentage was 9%, that he took.

A Yes.

Q And B.A.'s 10.

A And 4.

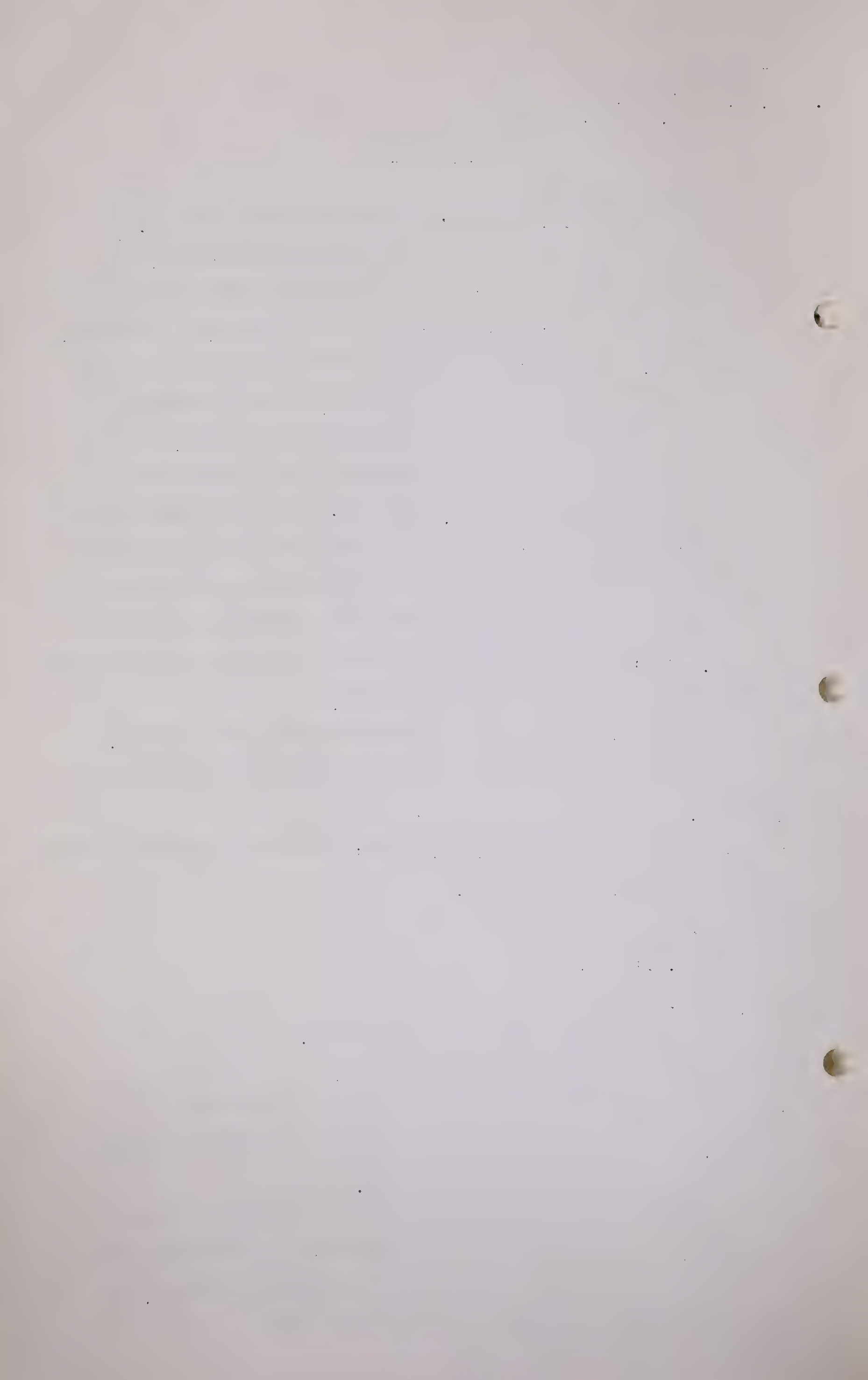
Q Well yes, and 4, which is another item.

A Well it is included in Mr. Hill's 9.

Q That does not necessarily mean that it is correct?

A No, no, but if you are drawing a comparison there I think it is proper to include them both.

Q Now from your knowledge of the situation has the British American got as complete an organization in the field and at their Calgary office as a comparable situation, as has Madison, from those two points of view?



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A I am not clear what you mean by "complete", Mr. Harvie.

Q Has the British American got as complete a field office?

A No.

Q And the work, that you might say Madison carries on in the field office, is carried on by the B.A. in its Calgary office.

A I am not altogether clear on that because you can do field office work without having a field office. It is a matter of classification and I would suspect that a good deal of the work that is done in the field by Madison is done in the field by the British American too, but that fact is not determinable from the accounts' classification.

Q There is no direct charge for that in the British American?

A There are direct charges but not field offices.

Q How are the direct charges?

A Well, included in the salaries and expenses of the people who are doing the comparable work.

Q You have been in and you are familiar with the office and staff of the B. A. in the Calgary office?

A Yes. Not too familiar.

Q What?

A Not too familiar.

Q Not too familiar, do you know what it is composed of, what the payroll shows?

A There is the manager who shares his time between the operations of this company and certain other operations of the parent company.

Q Who is that?

A Mr. McKenzie and Mr. Cull, who is the full time accountant, I believe spending all his time on the utilities work. At



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the present time there is Mr. Lindsay who is, I believe, on loan from their Toronto office. There is, I believe, an accountant, an assistant to the accountant doing bookkeeping work and there are certain stenographers whose services are available to both this company and the producing department of the parent company and I believe their work is such that it is interchangeable.

Q I suggest to you the only salaries or wages which are charged in connection with those items you mentioned are that of Mr. Cull and one stenographer and that all the others are included in this \$15,000 administrative charge, will you agree with that statement?

A I am not sure about the bookkeeper or the assistant.

Q So you really do not know and I think the evidence shows that that is the case. Now if that is the case, that our staff in the field and in the Calgary office is not as complete as the staff of the Madison and does not do as much work and a large part of the work which is done by Madison is done by our head office staff, that is Mr. Donellan and so on.

A I believe that is so, yes.

Q Now during the construction of this plant, if the salaries of these gentlemen and similar items are not charged directly to extra expenses, would you say it would be a proper thing to make an allowance in the general overhead.

A No, sir.

Q Why?

A Because I believe the charge should be a direct charge.

Q You believe it should be?

A I believe it should be a direct charge.



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Q If it was not, do you suggest that those should be added to the charge so it would be comparable, and deducted from the percentage for overhead, that would be your recommendation?

A My recommendation would be to eliminate the flat charge altogether and charge everything direct.

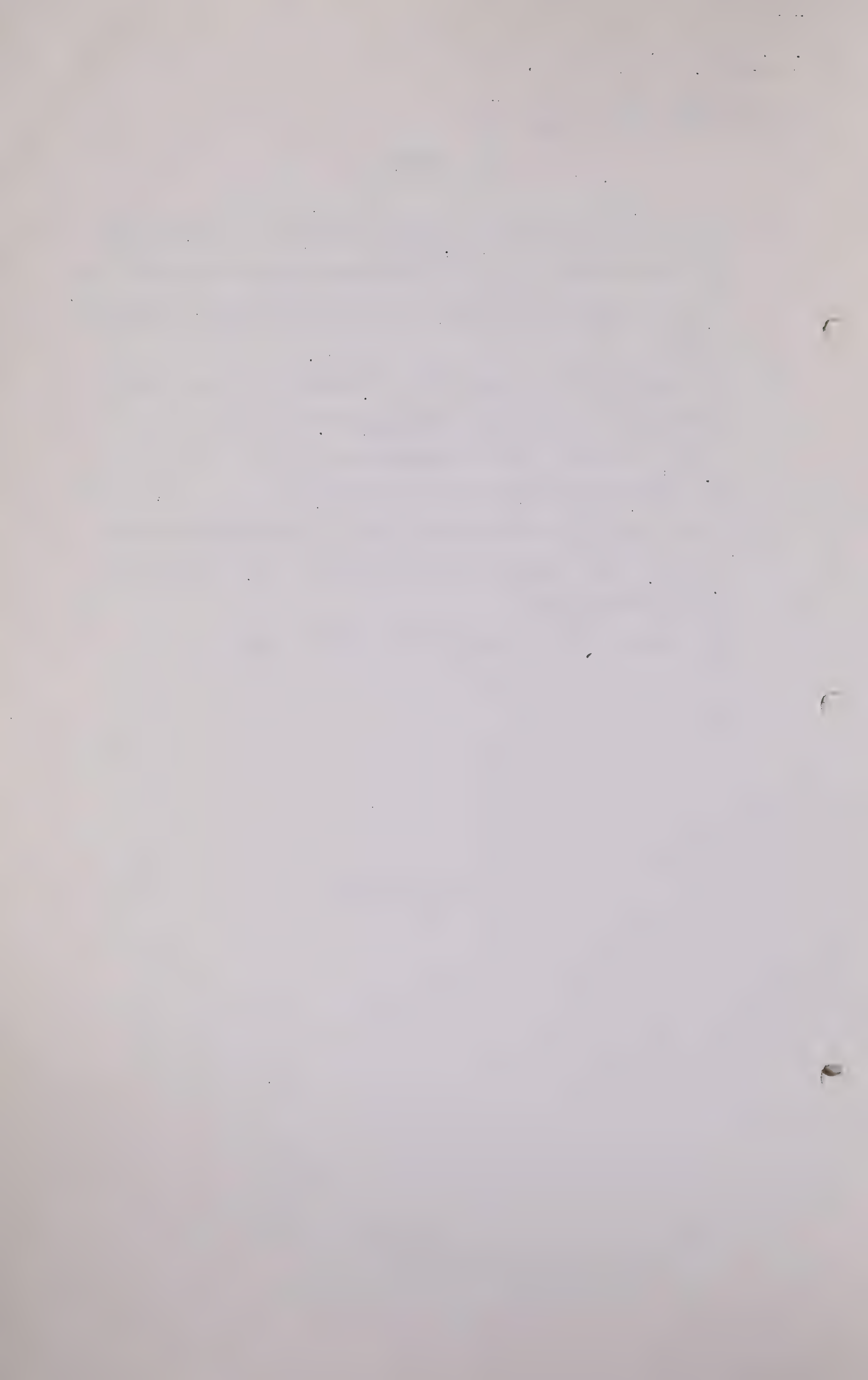
Q I am asking you about construction.

A Oh, for the period during construction.

Q Yes. Will you agree with me that if these are the only things I have suggested of that nature, that our charge is a direct charge.

A Mr. Cull's salary was not as a direct charge.

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A We are talking now of construction only. We are not talking about the \$15,000.00 a year.

Q I will put the question this way, would it be a proper place to give the allowance in the percentage of general overhead charge during construction period if there was not as many charges charged directly in the British American set-up as in the Madison ?

A Yes sir.

Q And it would be a matter of checking those to see how those compare or are related ?

A Yes sir. I think you have to distinguish between construction before or under regulation. I am not talking...

Q I am talking now of the construction period for new work.

A But before or during regulation. I think that is an important distinction to consider.

Q Are you suggesting any of the new construction was before regulation ?

A Before operation was commenced. Pardon me, I should have used that term.

Q Why do you use that distinction ?

A I do not think you should get it twice. For instance, in connection with the Madison cost of construction, construction was undertaken during the period when their plant was operating, during the period for which a rate would be fixed to cover a cost including that of administration. I do not think it would be proper and I do not think Madison has suggested they should receive full compensation in the current rate for cost for administrative expenses and then to capitalize and to include the same cost as part of its rate base.

Q Yes. I think we could agree with that. So you make your

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breaking off point at the date operation commenced.

A There is probably another breaking off, the point when regulation commenced too.

Q I am just asking you as far as British American construction is concerned. Do you suggest that new construction was not subject to regulation ?

A No.

Q It is all after regulation ?

A Yes sir, but some of it was prior to operation. I used the term incorrectly a few minutes ago, yes.

MR. BLANCHARD: I understood Mr. Chairman, that my learned friend Mr. Harvie was going to furnish Mr. Hamilton with the actual operating cost for the first seven months of 1945. Perhaps that would be of some assistance to Mr. Hamilton in comparing these costs.

MR. HARVIE: That was filed some time ago.

Q MR. BLANCHARD: Did you get it ?

A Yes, I discussed it yesterday but I understood it had not been filed.

MR. HARVIE: It was filed a long time ago.

A Yes, that is right, I am not sure whether it was filed or not. I know it was discussed.

MR. HARVIE: 113-C.

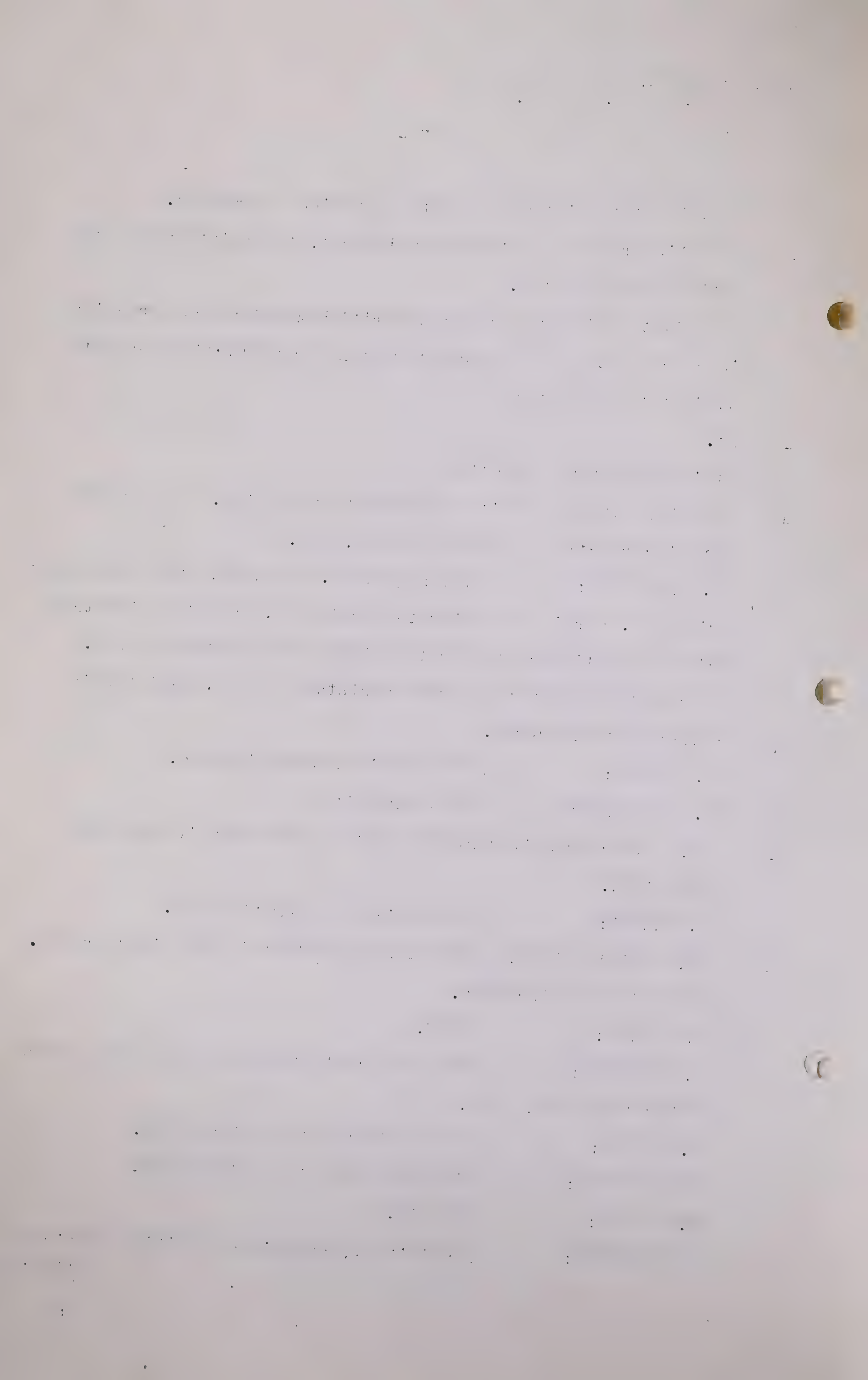
MR. McDONALD: Operating cost Statement for seven months ending July 31st, 1945.

MR. HARVIE: It was filed 17th of September.

THE CHAIRMAN: Filed on the 17th of September.

MR. HARVIE: Yes sir.

THE CHAIRMAN: As Exhibit 113, comparison of British American estimates



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and capital expenditures. And estimated capital, etc.
Perhaps we had better have our adjournment before there is
any further cross-examination.

(At this time a short adjournment was taken)

THE CHAIRMAN: You were through, Mr. Harvie ?

MR. HARVIE: Yes sir.

THE CHAIRMAN: Mr. McDonald ?

MR. McDONALD: No questions.

THE CHAIRMAN: Mr. Fenerty ?

MR. FENERTY: No questions.

THE CHAIRMAN: All right then Mr. Hamilton, I think
that is all for the moment. What will we go to now ?

MR. HARVIE: I thought we were going ahead and follow
up with the Madison operating cost.

THE CHAIRMAN: Whatever you wish. Is there anything else
that concerns the British American that we could take ?

MR. CHAMBERS: We had not finished with Mr. Donellan
yesterday. Exhibit 133. We got it yesterday afternoon and I
thought of following it up today.

THE CHAIRMAN: Oh well there is cross-examination on that
and we will take that up then.

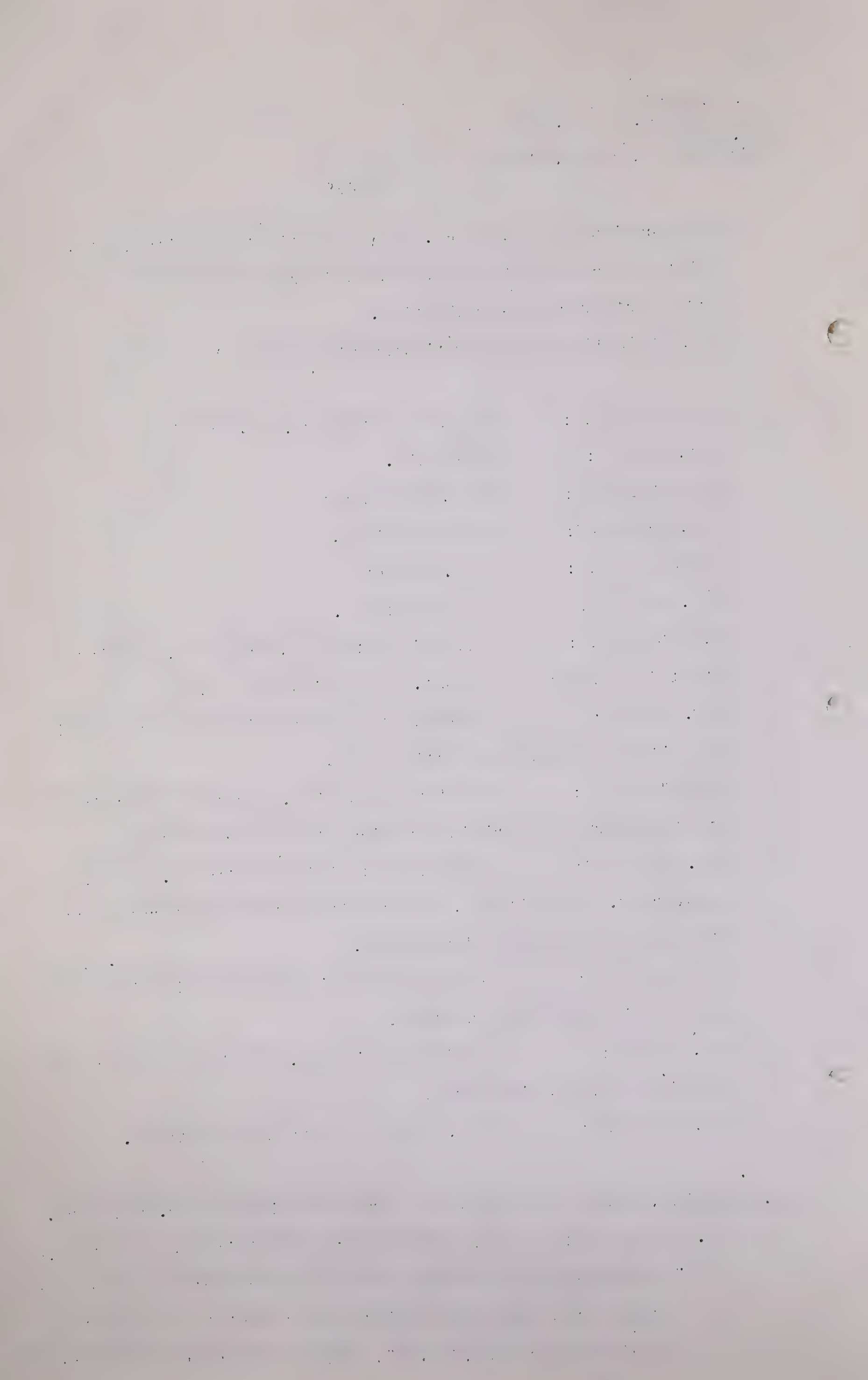
MR. HARVIE: Would you like Mr. Donellan now for cross-
examination, Mr. Chambers ?

MR. CHAMBERS: Yes, I have one or two questions.

R. DONELLAN, having been recalled, Cross-Examined by Mr. Chambers.

Q Mr. Donellan on the first page of your Exhibit 133 you state,-

"It was agreed that there would be an opportunity for me to
examine and check Madison's Statement Exhibit 102 showing a
total value of \$91,726.02". Should not that be Exhibit 118



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instead of Exhibit 102 ?

MR. HARVIE: Where are you referring to ?

MR. CHAMBERS: I am reading from the first sentence on
Page 1 of Exhibit 133.

A Yes, Mr. Chambers, I am sorry, 118 was the statement.

Q It should be Exhibit 118 ?

A Yes.

Q Have you a copy of Exhibit 118 ?

A I think I have.

MR. STEER: On the second line ?

MR. CHAMBERS: And also on the sixth line.

Q MR. CHAMBERS: And for the purposes of the record the
discussion that led up to and accompanied the filing of Exhibit
118 is found in Volume 41, Page 3212, and Volume 42, Page 3224.
That is where Exhibit 118 went in.

Now Mr. Donellan the purpose of Exhibit
118 you will recall was to apply Mr. Hill's unit cost to the
British American pipe ?

A Correct.

Q And Exhibit 118 was compiled by Madison showing its application
of Hill's unit cost to the British American pipe lines but
using Mr. Teis' basis of depreciation ?

A Yes.

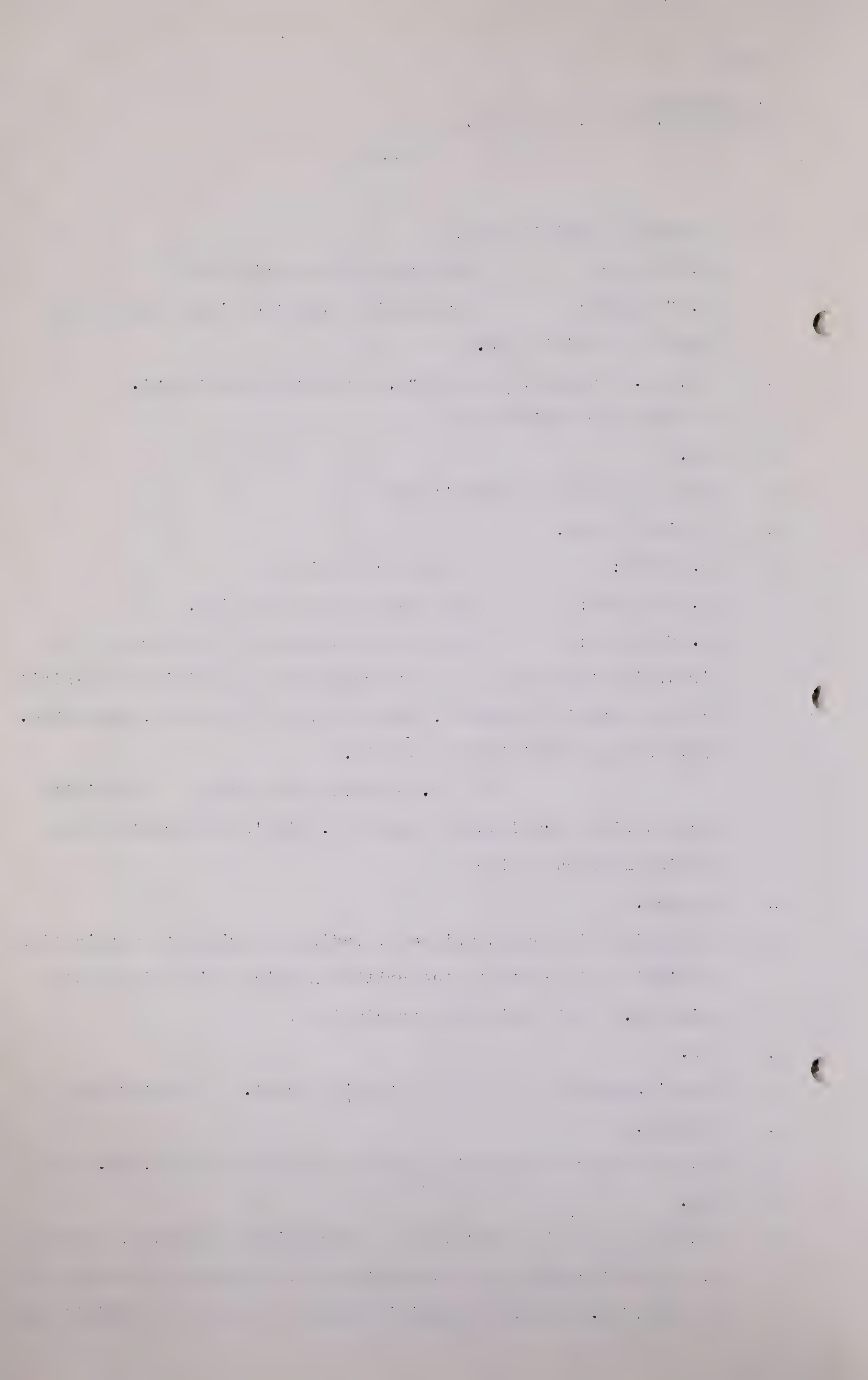
Q That is, depreciated only the tangible cost. Is that right ?

A Correct.

Q And the figure in Exhibit 118 so arrived at was \$91,726.02 ?

A Yes.

Q Now then on Exhibit 133 which was compiled yesterday, on Page
3, the last column, as I understand it, a comparable figure to
the \$91,726.02 shown on Exhibit 118 is on Page 3 of Exhibit 133



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\$89,916.21, and that is the figure that you referred to yesterday that the Madison in checking over had agreed to in principle was it not ?

A No that is not quite my understanding of it Mr. Chambers. When Exhibit 118 was presented and showed \$91,726.02, as I recall it, I raised the question of meters and other items which you were willing to concede to proceed with the argument. We arrived at a figure of \$110,000.00. I still said I would like an opportunity of going into the figures, of going into the books. We might have finished at that time because it ended with \$109,000.00. As I recall it the \$91,726.02 included the meters. The \$89,916.21 does not include the meters.

Q No, as I understand it in looking at Exhibit 118 that the \$91,726.02 was a statement that did not include and was not intended to include meters and so on ?

A That is right.

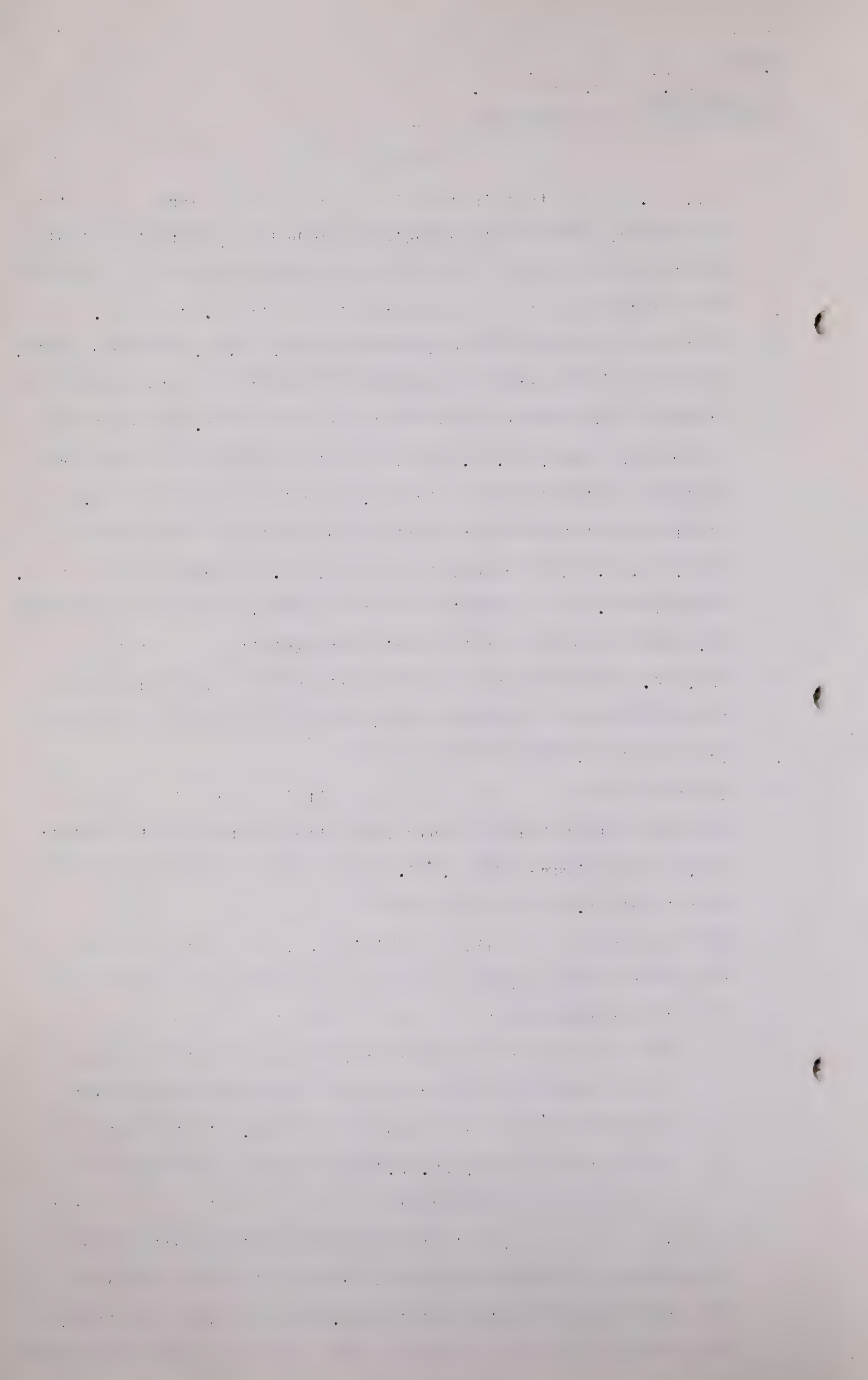
Q And the statement on Page 3 of Exhibit 133 exclusive of the meters and that includes only those items not shown in Exhibit 118, is the figure of \$89,916.21 ?

A That is right.

Q Now then on Page 1 again of Exhibit 133, the last sentence of the first paragraph;

"The total of this statement which is now agreed on as being substantially correct by representatives of both companies shows an adjusted value of total reproduction cost less observed depreciation on Mr. Hill's basis of valuation of \$109,452.45."

Now I just want to make this clear that in a discussion of Madison in the interval my instructions are that all they were agreeing to or considering were the comparable items that were in Exhibit 118. Would you agree with that?



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A The comparable items in 118 ?

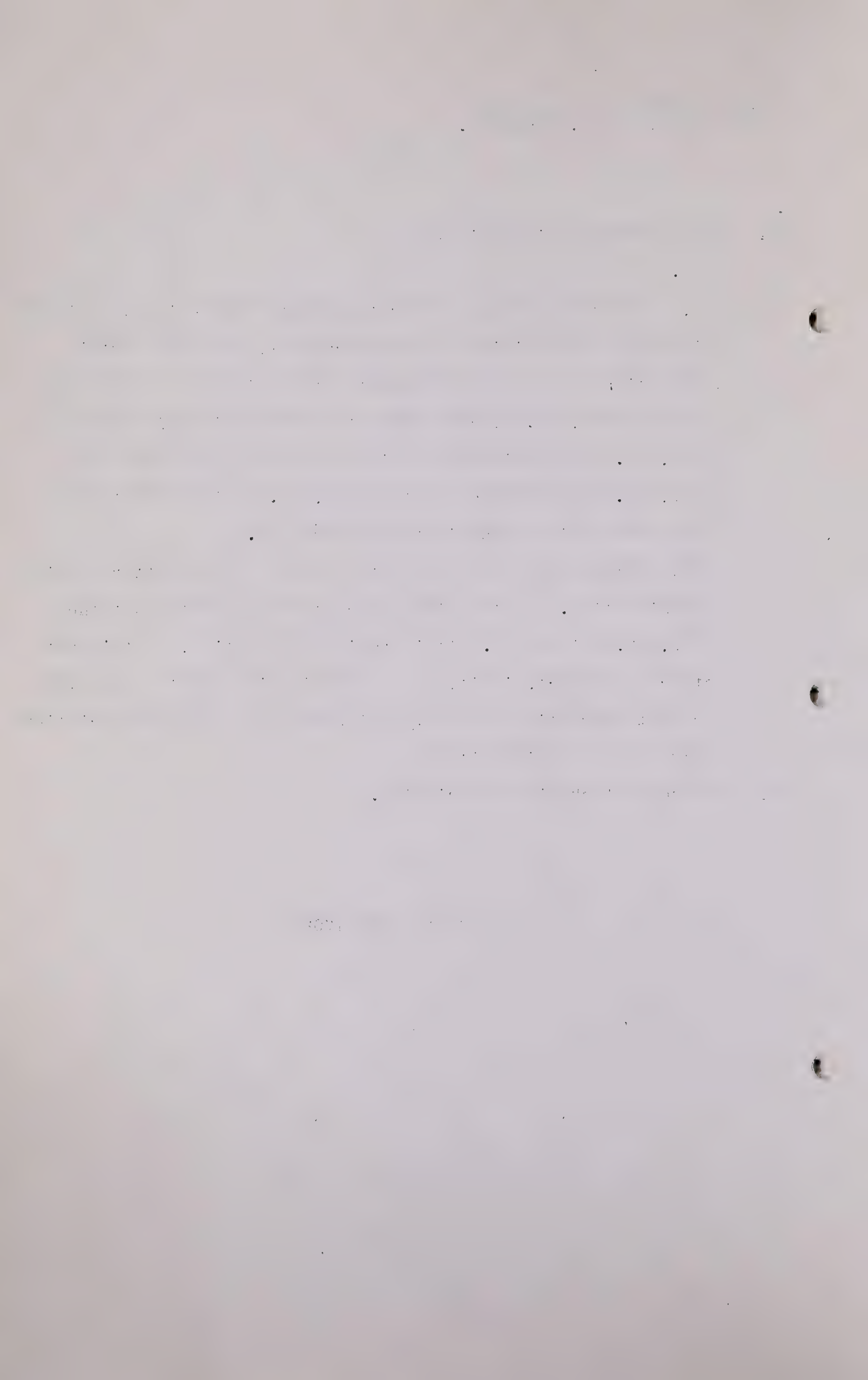
Q Yes.

A No, I think they went further than that because in our original discussion of Exhibit 118 as I recall it, you made certain suggestions to me and we brought a total in the witness box here of \$110,000.00, and sooner than take this adjustment of \$110,000.00 we decided to go into the whole total and the \$109,000.00 corresponds to the \$110,000.00 figure that we had at the last time I was in the witness box.

Q Well whether they agreed or not, I guess we had better examine the situation. In the first place when you state that the \$109,452.45 is on Mr. Hill's basis of valuation, that is not strictly correct, is it, and I have in mind first of all you are not suggesting that Mr. Hill would have taken depreciation only on the tangible items ?

A Oh no he took his depreciation.

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Q On the whole thing?

A Yes.

Q And Page 3 of Exhibit 133 only takes depreciation on the tangible items, does it not?

A That is right.

Q In other words, the \$109,452.45 is based on Hill's costs new, but the depreciation is based on the Teis proposition?

A Correct.

Q Now then, on this Page 3, I would like to examine this item of \$109,452.45. There are three columns dealing with cost of pipe?

A Yes.

Q And then there is another series of it dealing with costs of valves, fittings, drips, etc.?

A Correct.

Q And the total cost of valves, fittings and drips is \$4,124.51?

A Yes.

Q And then you have an item at the bottom for meters of \$9,828.00?

A Yes.

Q And then the installation cost of those meters is?

A \$572.00.

Q \$572.00?

A Yes.

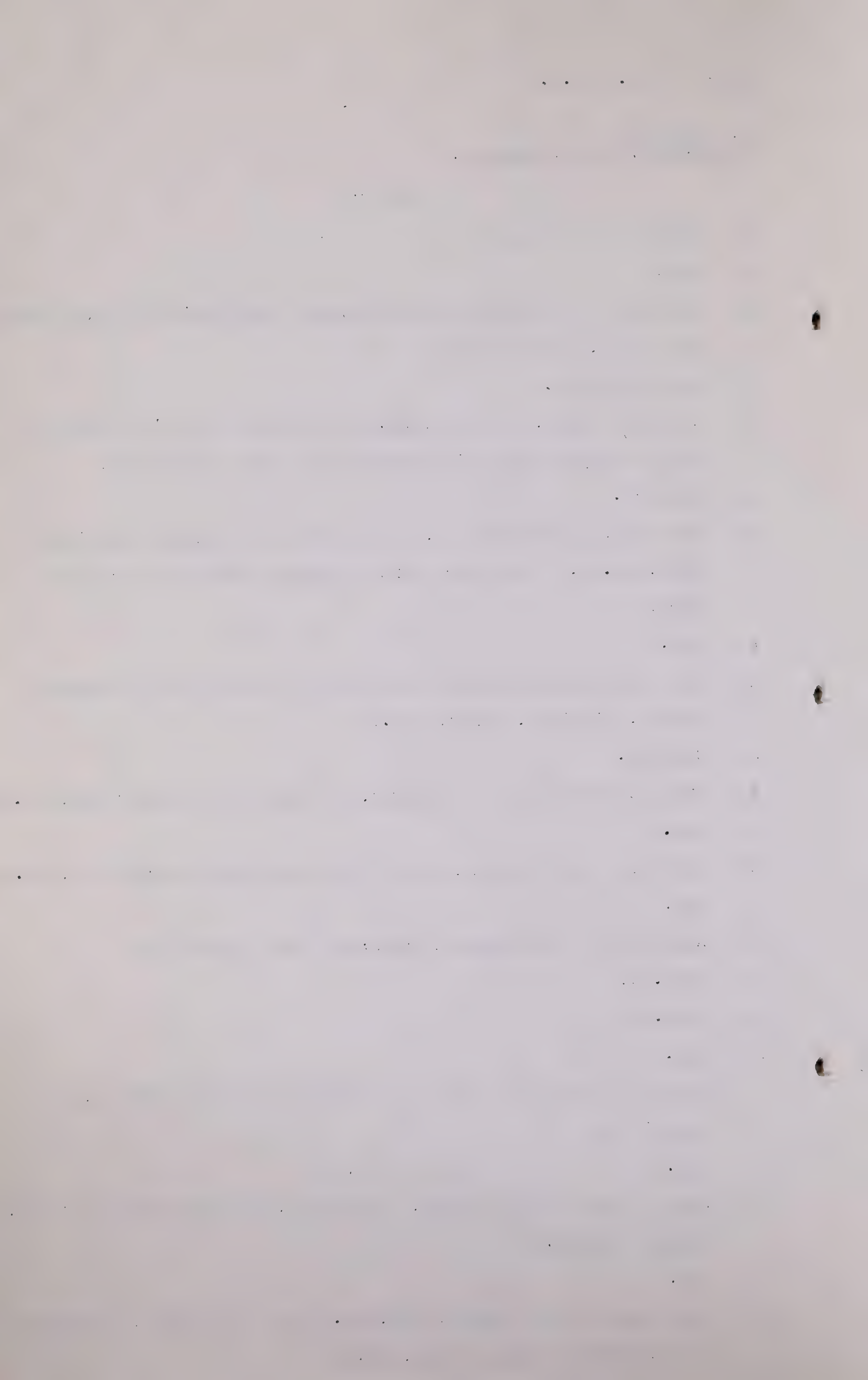
Q And that makes the cost of the meters installed \$10,400.00 doesn't it?

A Yes.

Q And the cost of the meters, the valves, the fittings and so on, totals \$10,524.51?

A Yes.

Q That would be the total of \$4,124.51 for the valves, fittings, drips, plus the meters, \$10,400.00?



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A Yes.

Q Now I am suggesting to you that Mr. Hill's unit costs did include valves, fittings, and meters - valves and fittings I mean. Have you got Exhibit 59 in front of you, Mr. Donellan?

MR. HARVIE: I think that is correct. Mr. Chambers, but if you will note that this statement on page 3 has been broken down into two items. Those items were taken out of Mr. Hill's costs and shown separately.

THE WITNESS: That is right.

Q THE CHAIRMAN: The combined unit costs, you have got Mr. Hill's figures, and brought them down?

A Yes, to bring them down to the unit basis.

Q It is merely a breakdown?

A Yes, merely bringing the meters down to show the separate items.

Q It is my recollection that Mr. Hill's unit costs do not include meters?

A No.

Q I may be wrong.

A They were meters but they were deducted in this statement here to bring them to a comparable basis.

Q MR. CHAMBERS: I see. Then on page 5 of Exhibit 133 when you come to the recomputations, you suggest you do not use Hill's unit costs?

A No.

Q But use your own and you get \$29,602.28, is that right?

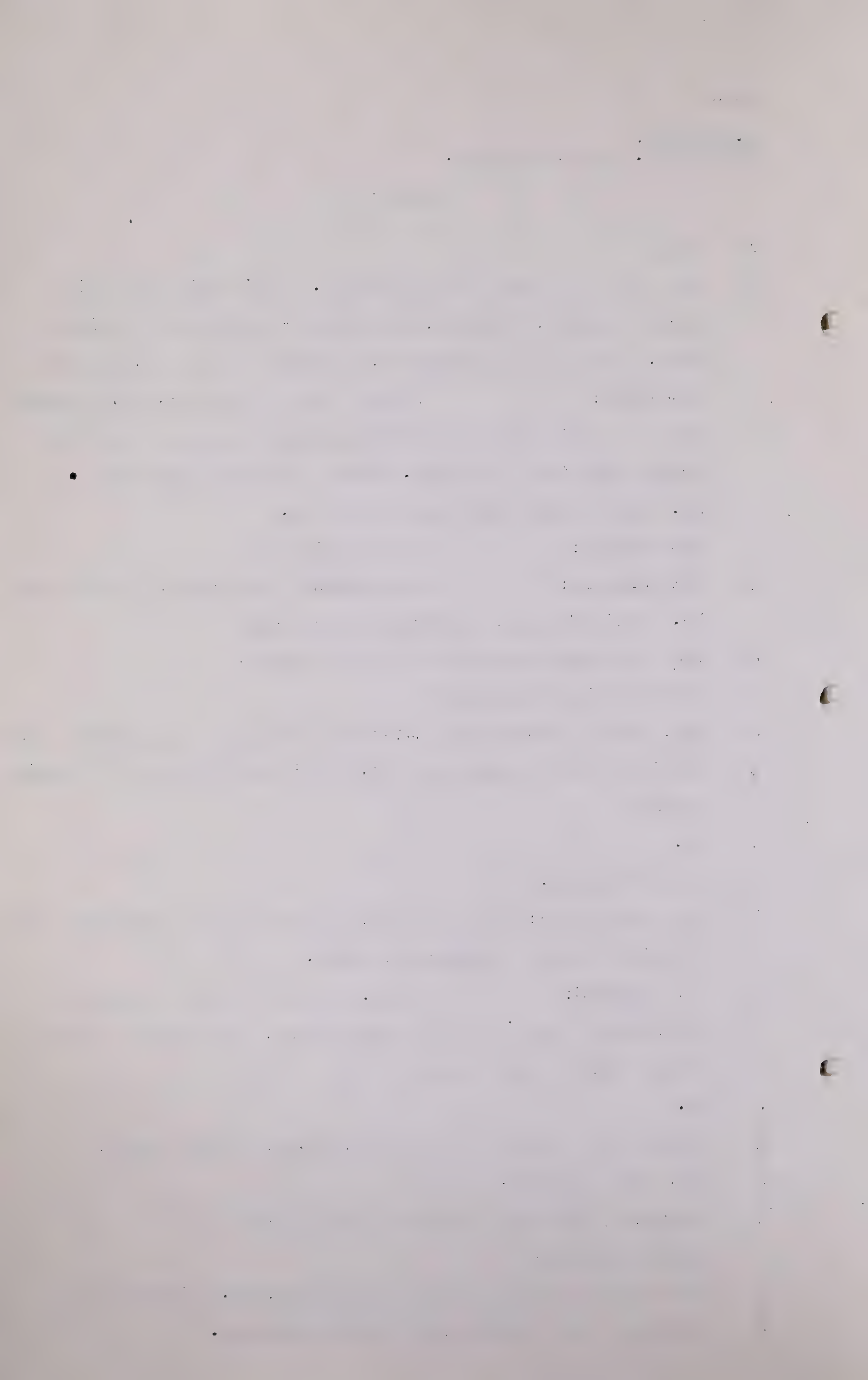
A Yes, that is right.

Q For valves, fittings, meters and drips, etc.?

A That is correct.

Q Now what unit cost is that item of \$29,602.28 based on?

A The unit cost as used in the Teis appraisal.



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Q The unit cost used in the Tcis Appraisal?

A Ycs.

Q Thanks, Mr.Donellan.

THE CHAIRMAN: Mr.Fenerty?

MR. FENERTY: No questions.

THE CHAIRMAN: Mr. McDonald?

MR. McDONALD: No questions.

THE CHAIRMAN: Mr. Blanchard?

MR. BLANCHARD: No questions.

THE CHAIRMAN: Mr. Harvie?

MR.HARVIE: No questions.

THE CHAIRMAN: Thank you, Mr.Donellan.

Now, are you ready to go on with the
Madison costs, Mr.Blanchard?

MR. BLANCHARD: Ycs.

.....

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ROBERT WINSLOW HAMILTON, recalled,

already sworn, testified as follows:-

Sir, with a view to accommodating Mr. Donellan, and not knowing how much time we would have this morning, we proceeded with this section of the British American operating costs, and I believe I mentioned earlier that we should have preferred with a view to a more orderly presentation of the subject, to deal with one or two preliminary matters dealing with the question of rateable gas, fuel gas and depreciation. I was just wondering, Sir, whether it would not be better to deal with those matters now and then go on with the Madison costs.

THE CHAIRMAN: Well, I think perhaps you know better than the rest of us, Mr. Hamilton, and if you think so you can go ahead with those items.

A Very good, sir.

MR. HARVIE: I think it would be very helpful to us.

THE WITNESS: I will deal now, then, Sir, with Section 4, commencing at Page 23 of Volume 2, and the related statements W-H-37 to 43 of Volume 1. I am reading now from Page 23, Section 4:

VOLUMES OF GAS TO BE GATHERED AND PROCESSED
AND THE DETERMINATION OF RATEABLE VOLUME
FOR EACH PURPOSE

In order fully to appreciate the significance of total operating costs of the utility companies upon unit rates, it is necessary to consider:

- (1) The volume of gas to be handled.
- (2) The distinction between rateable and non-rateable gas in respect to each function.

No detailed coordinated estimates of gas to be

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gathered, transmitted, repressured, scrubbed, and sold, appear anywhere in the accounting submission examined by us. The Madison submissions contain estimates of gas to be gathered and compressed in M-12, estimates of gas to be scrubbed and gas to be sold in M-13, and gas to be transmitted from Gas and Oil Refineries in M-14; these estimates are not summarized however to show the flow of gas from well to market and the non-market dispositions. M-2 does show an overall summary of volumes but not in sufficient detail for present purposes. The British American submission contains no reference to gas volumes.

We have accordingly utilized additional information obtained from the two companies to show:

- (a) The actual flow of gas (Madison) from well to market in 1944.

And in that connection we will look at Statements W-H-37 and 38 in a moment.

- (b) The estimated flow of gas (Madison) for 1944-1948 by years.

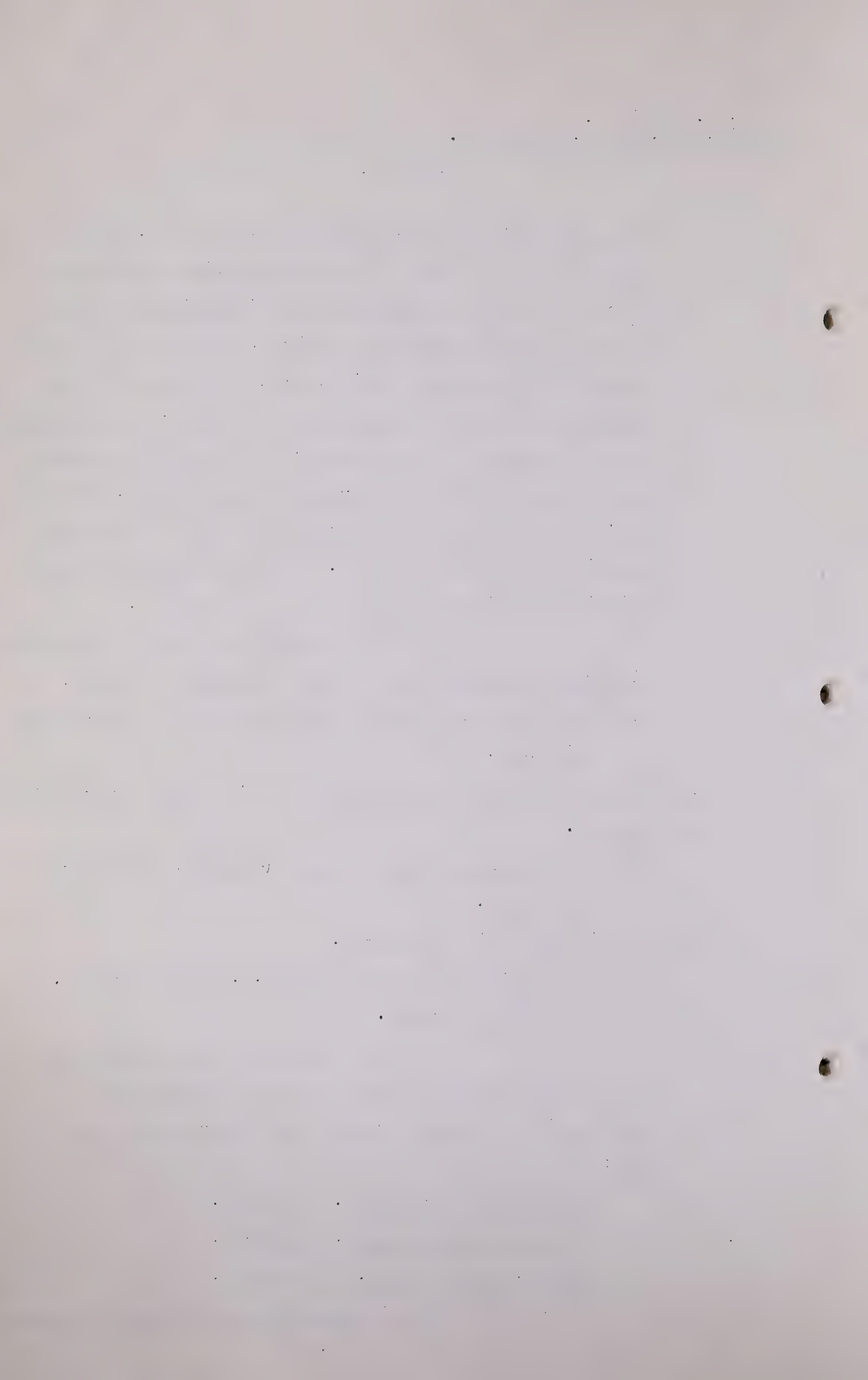
And that is dealt with in W-H-39.

- (c) The estimated flow of gas (B.A.) for 1945-1948. That is dealt with in W-H-42.

We have also, from this information, prepared pro forma statements to show a basis of distinguishing between rateable and non-rateable gas for:

- (1) Madison scrubbing. W-H-40.
- (2) Madison gathering. W-H-41.
- (3) B. A. gathering. W-H-43.

It is emphasized that these statements



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(with the exception of W-H-37 and 38) are based on estimates. In some cases the estimates are formally contained in submissions before the Board; in other cases they have been supplied to us with reservations by the companies, and finally in some cases they represent projections of our own in order to achieve reconciliation.

Statement W-H-37, is a reconciliation of total gas received with the net gas paid for by Madison in 1944. Of a total volume of approximately 20,800,000 MCF only 16,000,000 MCF was paid for, the difference of 4,800,000 MCF representing plant fuel, gas returned to producers, shrinkage and metering differences.

I suggest now we have a look at this statement W-H-37. This, Sir, is a summary of the physical compilation of the Madison Company showing a reconciliation of the gas which was received into the gathering system as compared with the gas that the company actually paid for.

The wet gas brought in from producers through the Madison gathering system amounted to 20 million, seven hundred and ninety-five thousand odd MCF, wet basis. And there is added after that 46,504 MCF on dry basis representing gas delivered by the British American Utility Company Limited. Those are right out of proportion by reason of the fact that the British American was only delivering for a few days in '44. The relationship will be different in '45. From that is deducted a total of 4, 885,586 MCF in respect to gas which was brought into the system in volume but for which no payment was made to producers. That deduction is made up of 270,871 MCF in respect to reductions in gathering, losses in volume in gathering, 59,000 for fuel for heaters, 99,000 for fuel for

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compressor No. 3, and 126,000 that was popped through the air with an amount of 14,000 for metering differences, making the total reduction through gathering, 271,000 MCF.

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passing through the absorption plant resulting in a further reduction of 1,362,000 m.c.f., made up of 968,000 for vapours and 395,000 for absorption plant shrinkage. Disposals of unscrubbed gas total 3,039,991 m.c.f. made up of 803,000 for plant fuel used in boilers, 54,000 for excess gas flared, 1,800,000 for gas returned to producers, with a minor adjustment for metering differences and 382,000 for scrubbing plant shrinkage. There was also an amount of 216,726 m.c.f. of scrubbed gas which was used for fuel and there is a minor difference of 4,126 m.c.f. in order to achieve a reconciliation. So that the over-all picture is that whereas you are taking in close to 21 million feet actually there is only 16 million paid for. At the bottom of the page are the disposals of gas not paid for summarized.

I am reading now from page 24 again. Statement WH 38 is a continuation of WH 37 and shows that further loss of stated volume of approximately 500,000 m.c.f. occurs before gas reaches the market. It will also be noted that a complication arises in accounting for gas volume sold, in that a large part of the sales are expressed in terms of gas measurement at a temperature and pressure differing from that obtaining in previous stages of computation. It occurs to us that it would be desirable to eliminate this complication for the future if possible. Now looking at statement WH 38. The opening figure is 15,955,960 m.c.f., total gas purchased and paid for, brought forward from the previous statement. That amount is reduced by 498,185 m.c.f. in respect to a very considerable item for metering differences and adjustments and a smaller item of 51,669 m.c.f. of gas which was delivered to the town of Bow Island but which is

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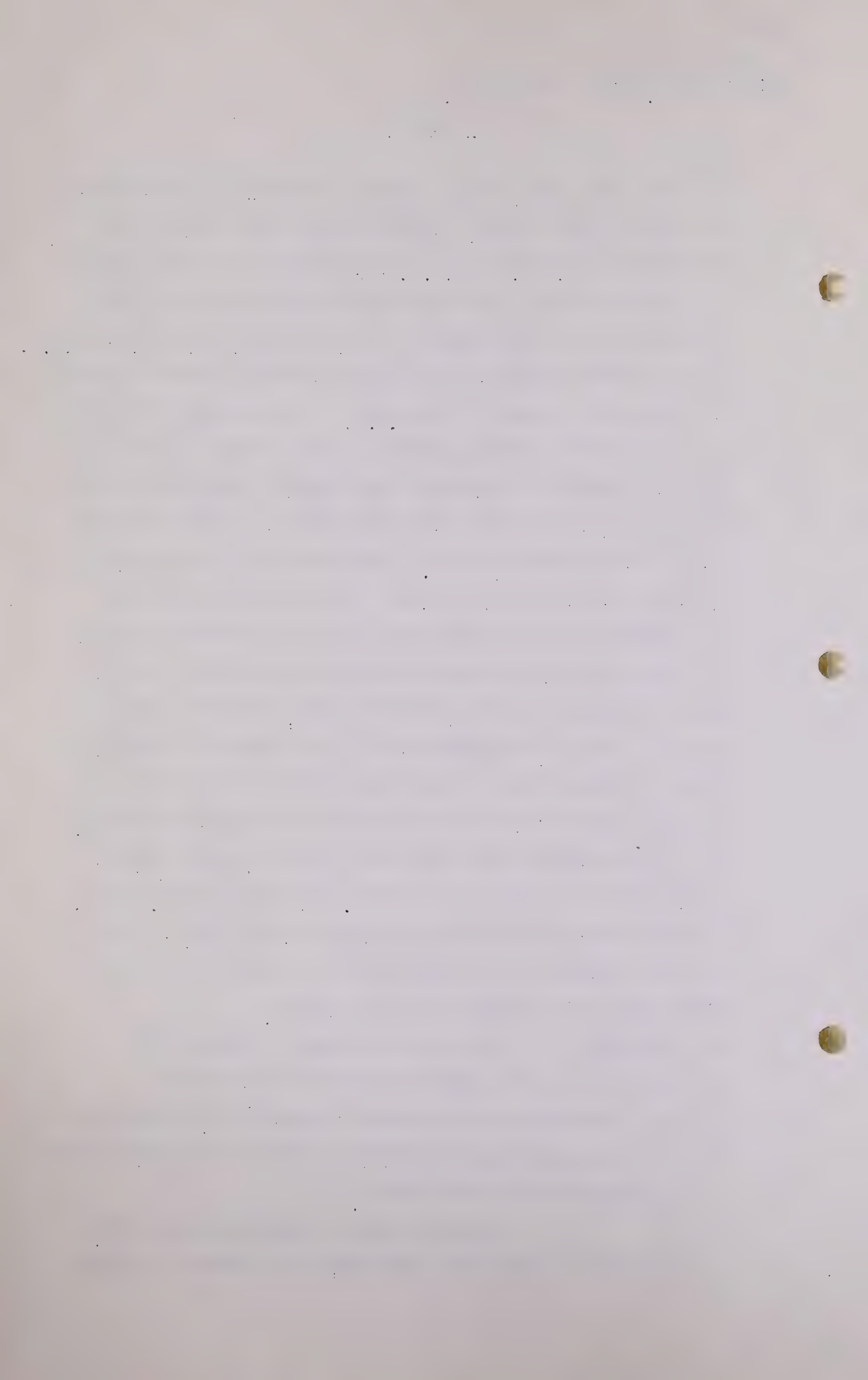
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not paid for, that being a matter of contract I believe with the town of Bow Island. Actual sales of gas for the year amounted to 15,594,677 m.c.f. according to the tabulation at the foot of the page and that compares with the total available in the main body of the statement, 15,457,775 m.c.f. There are two points in that connection to be noted and that is that when we speak of an m.c.f. of gas and who is to pay for it, we must be very careful to bear in mind the very substantial amount of shrinkage that occurs between the time the gas initially passes into the gathering system and the time it is ultimately sold. The other point is that complications arise from two sources. First of all, metering differences, which I understand are a considerable problem and the second source from the fact that a cubic foot of gas is measured on two different bases, one within the Madison system by contract with the producer and another basis on temperature and pressure governing the basis of sale between the Madison Company and the Canadian Western. It is a statistical obstacle there which presents itself every time you turn around almost. It would be desirable, I do not know whether it is possible or not, but it would be very desirable if we could adopt one basic measure of temperature and pressure for gas volume.

Q MR. CHAMBERS: One of those bases of measurement is laid down by the Conservation Board is it not?

A I am not altogether familiar but I know that the two bases are both required under contract and it is a reconciliation of irreconcilables at the moment.

I am reading now again from page 24.
Statement WH 39 presents a projection of Madison volume

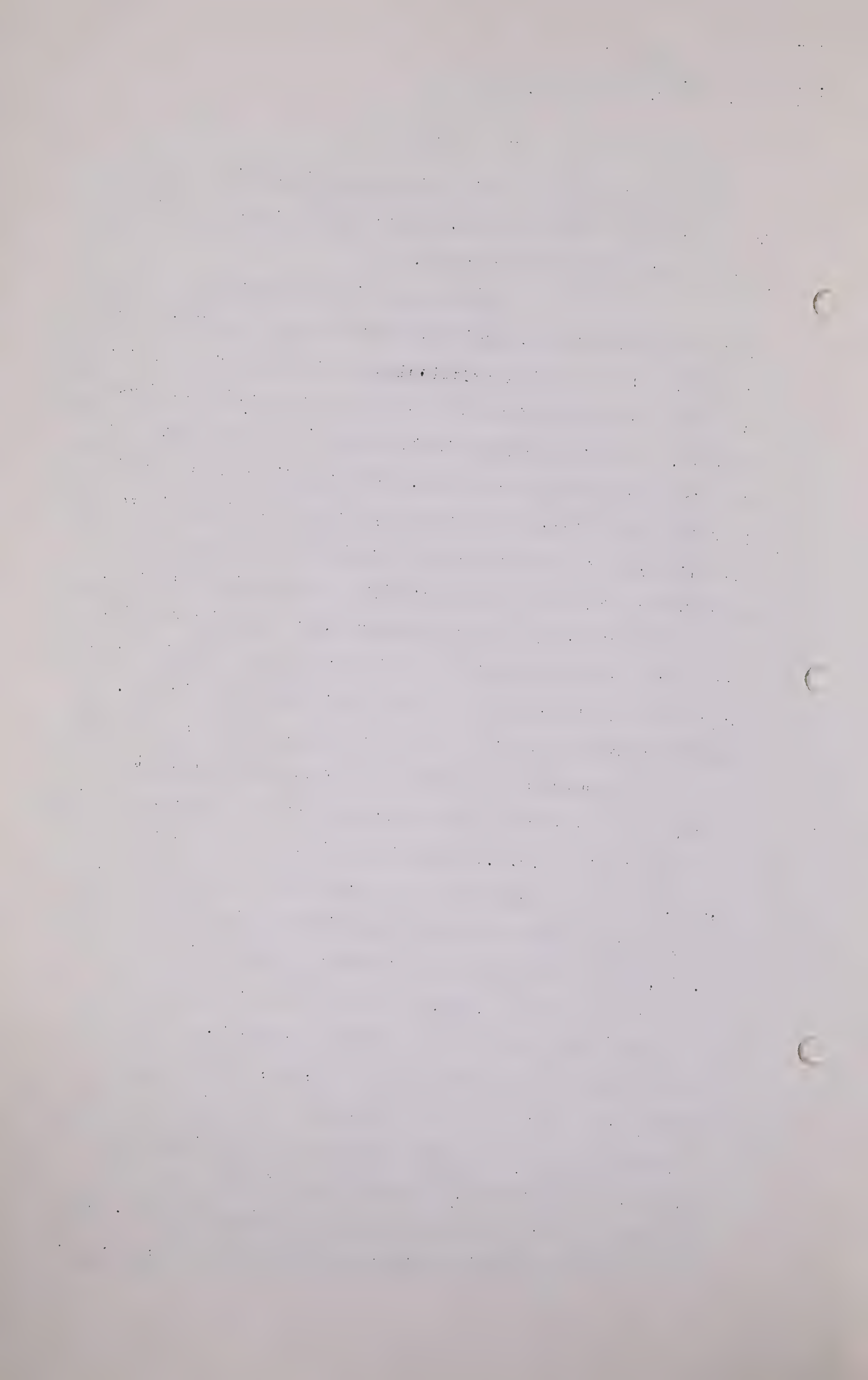


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estimate for the 5 year period with extensions of our own to effect a complete summary. Our own estimates are of course quite open to correction.

Statement WH 39 is a summary of the estimated gas volumes, received, processed and delivered by Madison. It sets out statistically a summary for the year 1944 on an actual basis and on an estimated basis for 1945 to 1948. The first column is the total of the summary for the five years there presented. The red figures denote for 1944 that the figures are factual, actual and for 1945 to 1948 the red figures indicate that they were estimates supplied us formally or informally by the Madison Company. The purple figures, on the other hand, represent estimates fitted in by ourselves in order to achieve the total reconciliation and to give some outline of the whole picture. Substantially the salient points are these and I am dealing now with the "Total" column only. It is expected that Madison will receive from producers over the five-year period some 82 million m.c.f.; that there will be a reduction of 1,350,000 in the process of gathering so that the net wet gas gathered going into the absorption plant will amount to 80,646,000. There will be a further reduction in the absorption plant of 5,352,000 so that the residue leaving the absorption plant is down now to 75,294,000. There will be disposals of unscrubbed gas of 16,697,000 so that Madison will deliver to the scrubber, the residue gas which left its absorption plant at 75 million will reach the scrubber as 58 million. At that point it will be met by gas from the British American system estimated at 10,600,000 and by Gas and Oil Refineries' gas estimated at 5,100,000.



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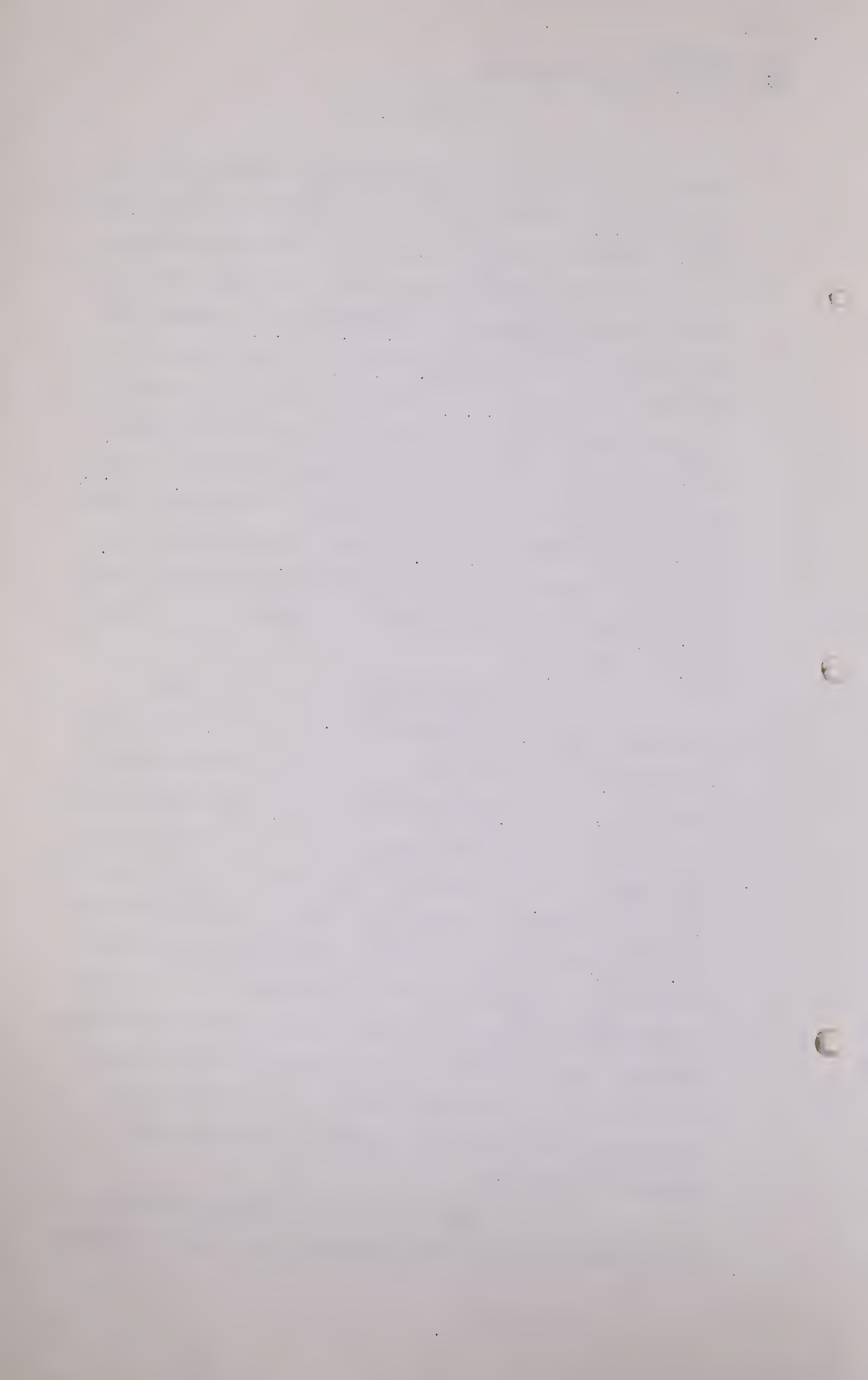
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So that there will be delivered to the scrubber some 74 million m.c.f. There a further reduction occurs in respect to the scrubbing plant shrinkage and metering differences due to pressure changes and so forth. So that there is a total scrubbed shrinkage of 3,758,000 m.c.f. making the net residue scrubbed of 70,571,000. So that there is a drop of 11 million m.c.f. despite the fact that at the scrubber there was 15 million added from the South end. So that the total loss is on the order of 26 million m.c.f. The scrubbed gas residue is disposed of as follows. There is 1,300,000 for fuel, 200,000 goes to Bow Island town, 3,800,000 anticipated to go to Bow Island storage and only 65,000,000 therefore anticipated as saleable or required for the market.

I am reading now from page 25.

Statement WH 40 is a demonstration of the principle which in our view should be adopted in reducing scrubbed volume to a basis of rateable scrubbed volume. Gas scrubbed for Bow Island storage should properly, in our opinion, bear some part of the scrubbing charge, but since it is processed in the off-season, it should not bear a full proportionate (i.e. average) cost. To indicate this principle we have rated it at one-half, but are not satisfied that this is necessarily the appropriate fraction by which it should be reduced. Gas processed for Bow Island Town is delivered year-round as required and should, in our opinion, be charged at full rates to the parties on whose behalf delivery is made.

Now the statement WH 40 in the top half shows the total estimated sales to be made by Madison



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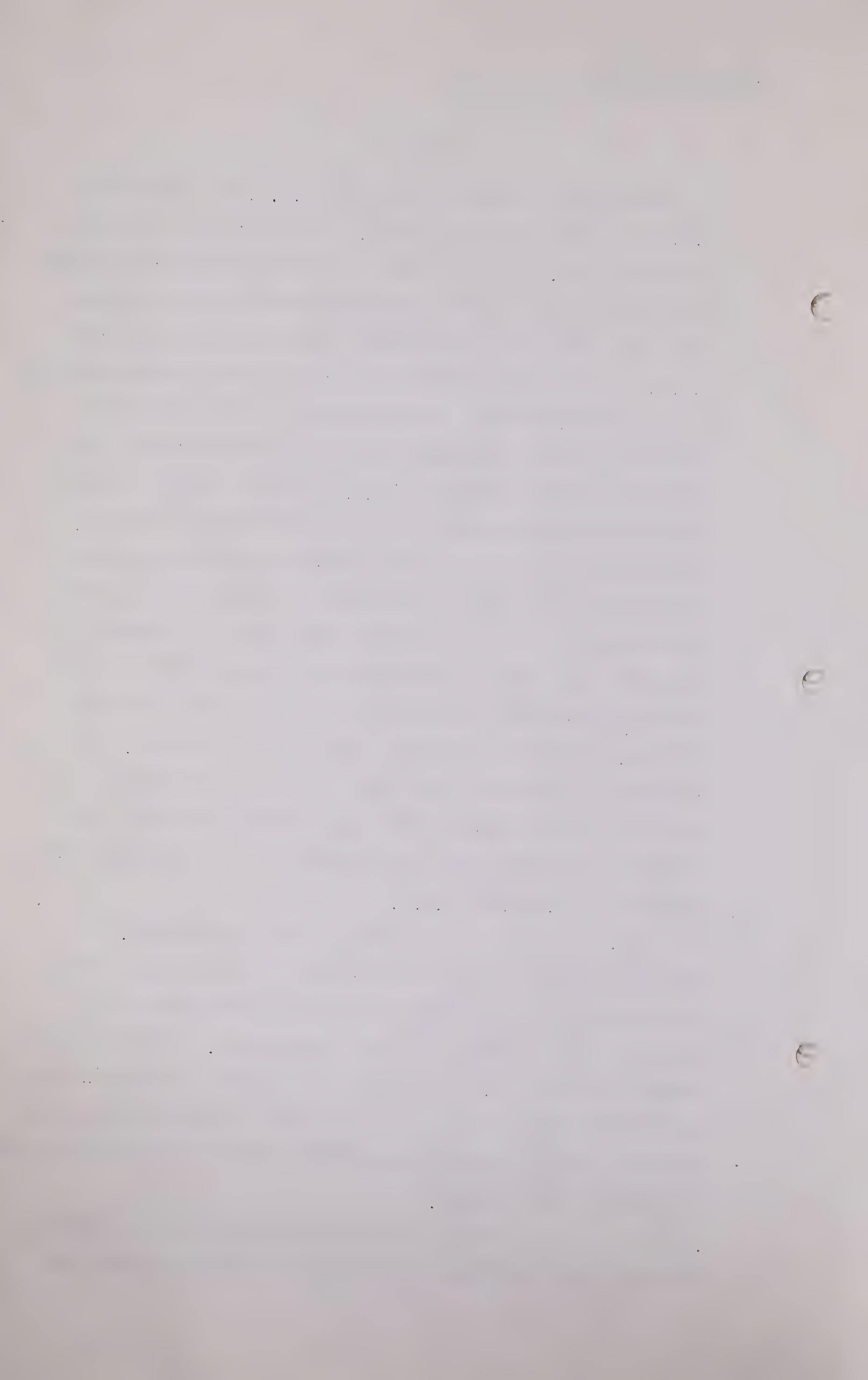
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of its own and British American and G.O.R. gas, 65 million m.c.f. for the five-year period. In addition to that there is 211,000 m.c.f. of gas which has been scrubbed for delivery to Bow Island town on the year-round basis and in addition there has been added an amount of approximately 2 million m.c.f. being one-half of the anticipated delivery for storage in Bow Island. So that our suggestion is that the total operating cost of scrubbing should be divided by, for the five-year period, 67 million m.c.f. rather than on the one hand by 65 million m.c.f. sale or by 70 million scrubbed. In other words the proper divisor rests somewhere in between the volume to be sold and the actual volume to be scrubbed. If you divide the total scrubbing cost by the 67 million, it means that the market is bearing approximately 65/67ths of the scrubbing costs and someone else is bearing the other 2/67ths. Just who we do not suggest at this moment. The lower half of the statement merely ties up the rateable volume of 67 million-odd with the remaining scrubbed gas volumes to arrive at the total amount of the scrubbing which amounts to 70,571,268 m.c.f.

I am reading again from page 25.

Statement WH 41 is a similar treatment of gathering volume to indicate the principles inherent in determining what volumes should be rated for gathering costs. For the reason mentioned above, all storage gas is rated at one-half - that was because it was gathered during the off-season - but here again we are suggesting the principle rather than the particular fraction to be employed.

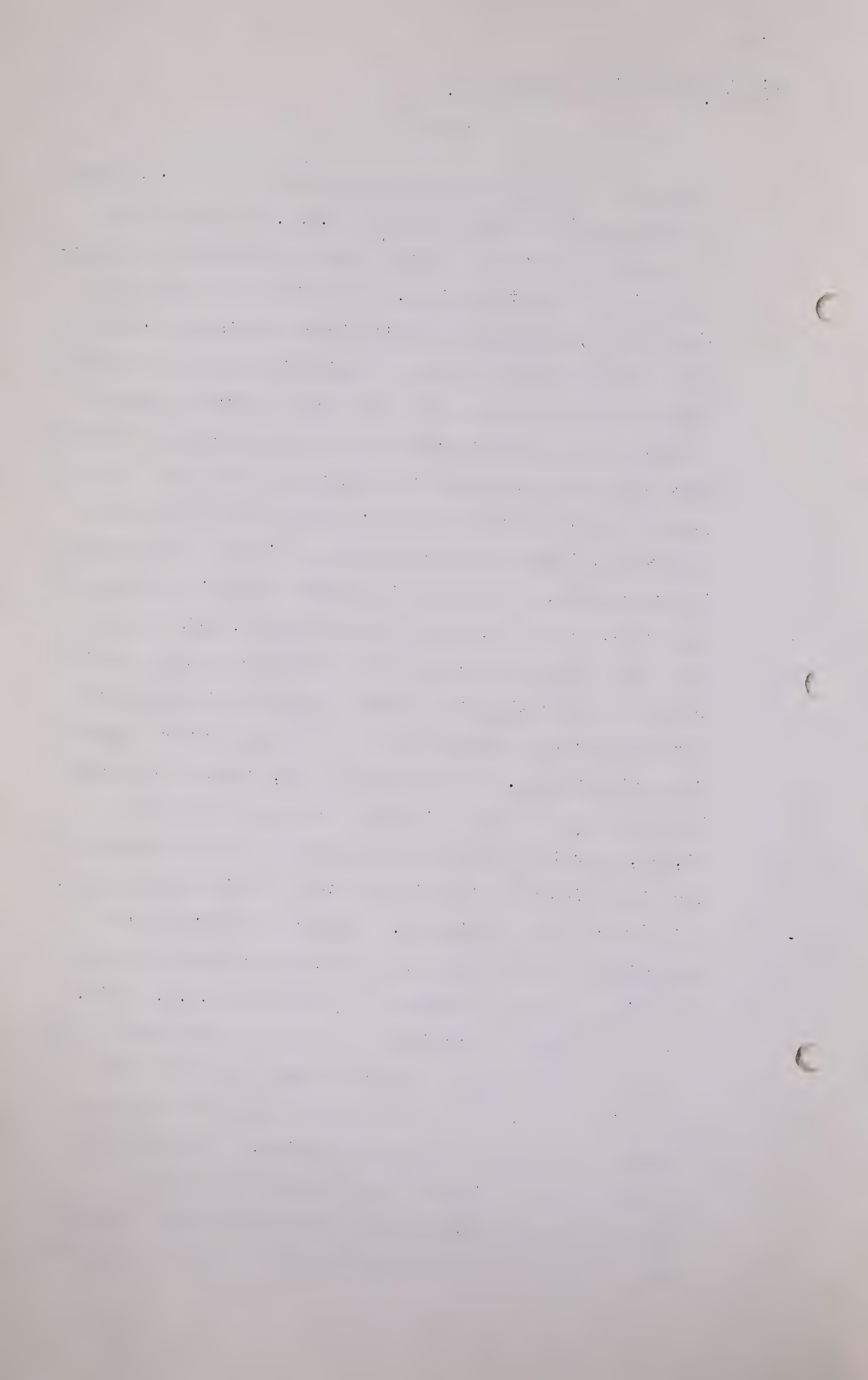
The absorption plant is deemed chargeable directly with gathering of gas which is later returned to



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producers. Whether the absorption plant should be charged at more than the average rate per m.c.f. for absorption extraction volumes is a further question to which consideration will no doubt be given. I believe that point has since been covered by Madison's direct submission. Amounts added to Bow Island and market deliveries are necessary to absorb the shrinkage in the subsequent scrubbing process, as these volumes are expressed in terms of scrubbed measurement rather than the sour gas equivalents thereof. Fuel gas is deemed not rateable, as to charge this gas with processing, introduces a complication which in our opinion is unwarranted. The amount involved is not significant in any event. Looking now at Statement WH 41, this follows the same principle as the statement we were looking at in regard to the rating of scrubbed gas but it is somewhat more complicated because you are one step further removed from sales volume. On Statement WH 39, you will observe that there was a figure for net wet gas gathered of 80,646,635 being the total net wet gas gathered, which is the final figure in the first column of this statement 41, which we are now looking at. It is a question now of determining what is the proper basis to reduce the total operating cost for gathering to a unit per m.c.f. basis. Absorption Plant extraction and gas to be returned to the producers was deemed chargeable in any event to the absorption plant. Whether they pass on part of that to someone else or not is another question. We have also mentioned that it may be that the absorption plant extraction should be weighted more than average. We did not feel at the time this was prepared to be in a position

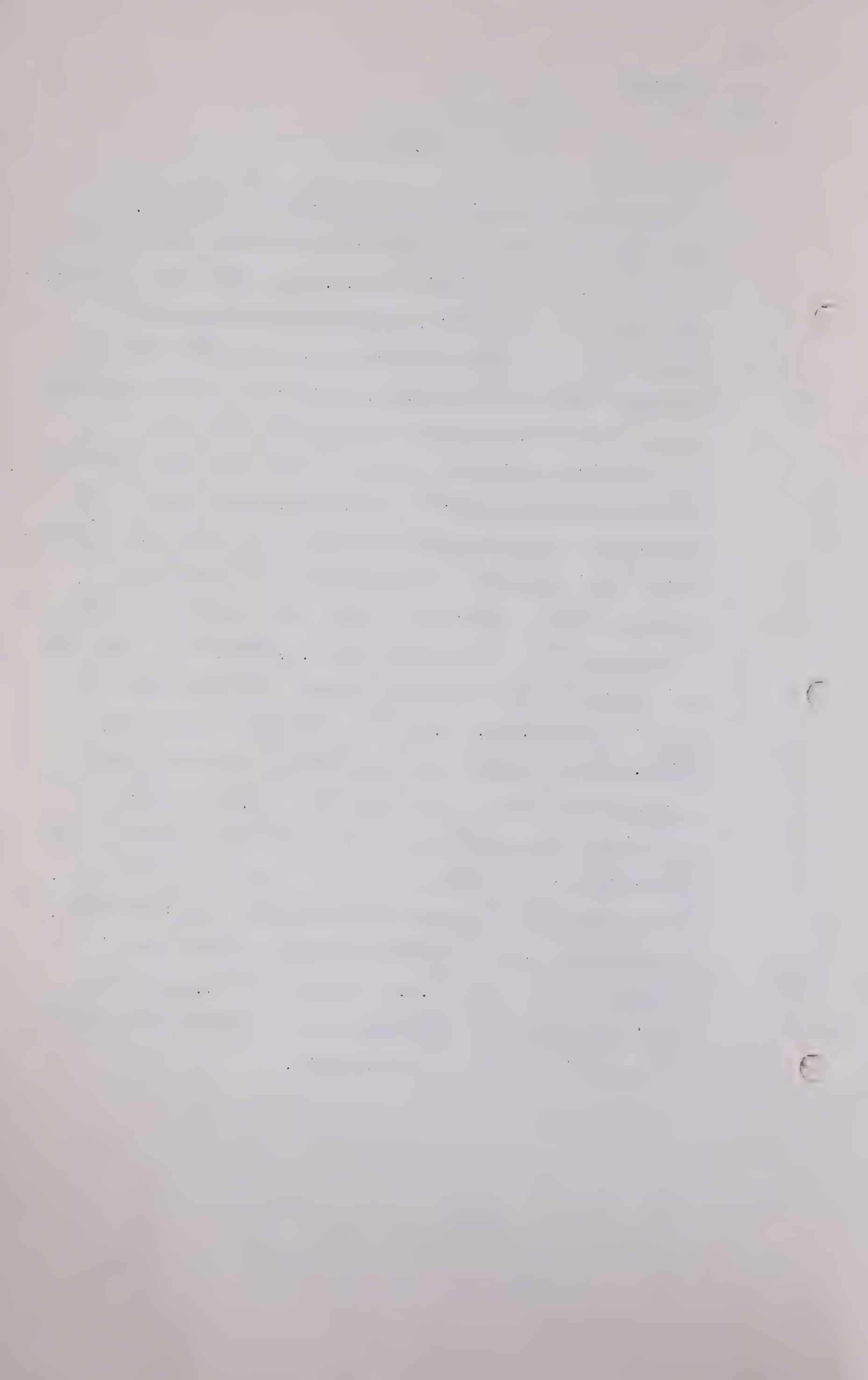


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to express an opinion on that matter at the time. So that there is the first contributor, the absorption plant on the basis of 8 million m.c.f. out of a total of 80 million. Then there is a category of contributor indicated by summarizing the volume which should be chargeable to the producer and/or the absorption plant and/or to the Canadian Western Company and Royalite and gas falling in that classification is Turner Valley storage, Bow Island storage, and that plus the scrubbed sour factor added there is to convert the Bow Island storage, which is on a scrubbed basis, back to the volume it would represent if it were sour, because it is gathered sour rather than scrubbed, making a total storage of 14 million m.c.f. and we have rated that at one-half so that we have deducted 7 million there to make it net 7,013,000. We have added Bow Island town 211,000 which is again on the scrubbed measurement and consequently has to be increased by 11,399 to bring it to its sour equivalent and we get the total chargeable to that category of 7 million out of a total of 80 million. Then the third category is gas chargeable to the market, representing sales made by the Madison Company less British American and G.O.R. deliveries, 49,460,000 and this again has to be increased by the scrubbed-sour factor to bring it back to its sour basis.

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And that applies specifically to almost fifty-three million out of the eighty million.

On that basis the total amount of rateable gas gathered is the sum of the eight million of the absorption plant, the seven million chargeable to that group of distributors and fifty-two million to the market, or a total of sixty-eight million, and as compared to that the eighty million that actually was gathered. The difference of twelve million representing certain assumed unrateable gas, three and a half million plant fuel, two hundred and fifty-four thousand flared gas, seven million being one-half of the storage gas for which no charge is suggested and scrubbed fuel of a million, three hundred thousand, which again has to be increased by that scrubbed sour.

Q MR. HARVIE: What percentage do you use in that increase?

A The exact percentage which will account for the shrinkage of 3,758,036 Mcf shown on Statement WH 39 and on Statement WH 39 in the first column we see the total reduction through scrubbing of 3,758,036 Mcf which is all accounted for on Statement WH 41 in these figures. The scrubbed sour factor applicable to Bow Island storage of 210,162; the scrubbed sour factor applicable to Bow Island town deliveries of 71,399; the scrubbed sour factor applicable to sales of 3,364,794 and the scrubbed sour factor applicable to storage fuel 71,501; if you add those four figures together you get the 3,758,036.

Now at the foot of the page we summarize the five year annual average of those figures which we have just been considering in total and we find that the absorption

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plant will take, on this basis, a million - six; the producer absorption plant, Canadian Western and Royalite will take a million - four, and the market will take ten million - five, making a total rateable gas of thirteen million - six.

The non-rateable gas amounting to two million - four, amounts to the total net wet gas gathered of sixteen million - one.

The next column shows the percentage of each category to the total and then bearing in mind that no one has to pay for the non-rateable gas, the Compressor costs themselves must provide enough to cover the unit cost of the non-rateable gas, gives you in the final column the percentage of each rateable group to the total rateable group.

Now we are not suggesting at all that the facts and so forth which are suggested here are appropriate or right but some consideration of those factors are inevitably in order to meet this problem of unit gas. I am reading now from Page 25.

Statement WH 42 presents a summary of gas volumes estimated to be gathered, processed and delivered by British American and Statement WH 43, a computation of rateable volume gathered similar to that discussed above for Madison. Both of these statements include estimates furnished by Company officials by way of illustration only and are, therefore, utilized herein with that reservation.

Statement WH 42 is predicated on an annual delivery, pardon me, an annual delivery by producers through the gathering system of seven million - two, for each of the years 1945 and 1946 and six million four hundred and eighty thousand for each of the years 1947 and 1948.

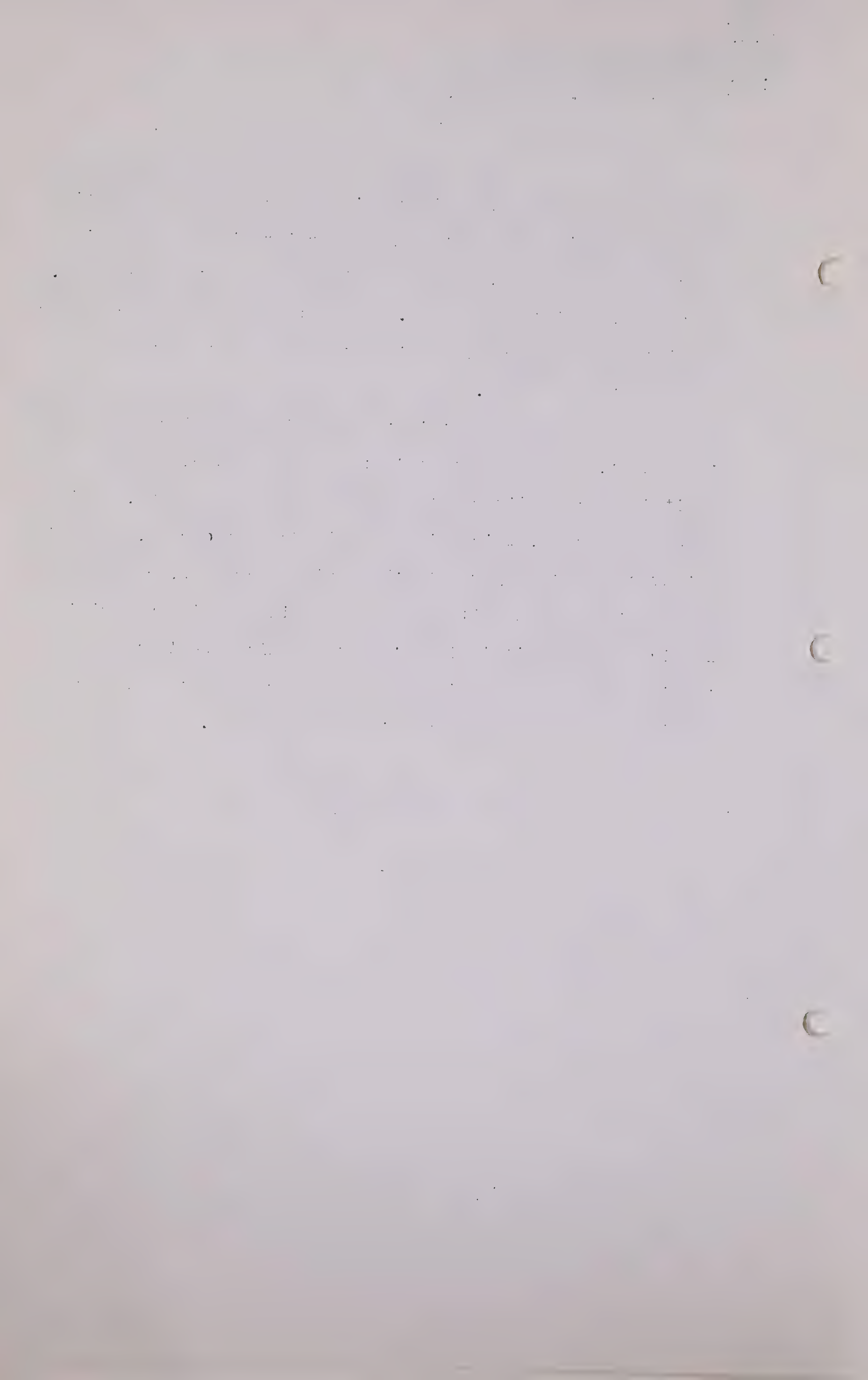
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The figures in respect to the absorption plant extraction of plant fuel are arbitrarily ten and five percent respectively, which I believe now are to be changed. Pardon me, - fifteen and ten. It states here the percentages of fifteen and ten and I believe the more up to date estimate would be ten and five.

Now this total residue leaving the absorption plant, so much of that is to be repressured and so much of it is to be delivered to Madison and of the 7,200,000 in 1945 for example, which will come in from producers, approximately half actually gets to the Madison scrubber, consequently when we talk about unit cost of gathering gas in the British American system it is important to consider whether we are talking about gas that is to be paid for or whether we are talking about the total amount of gas handled.

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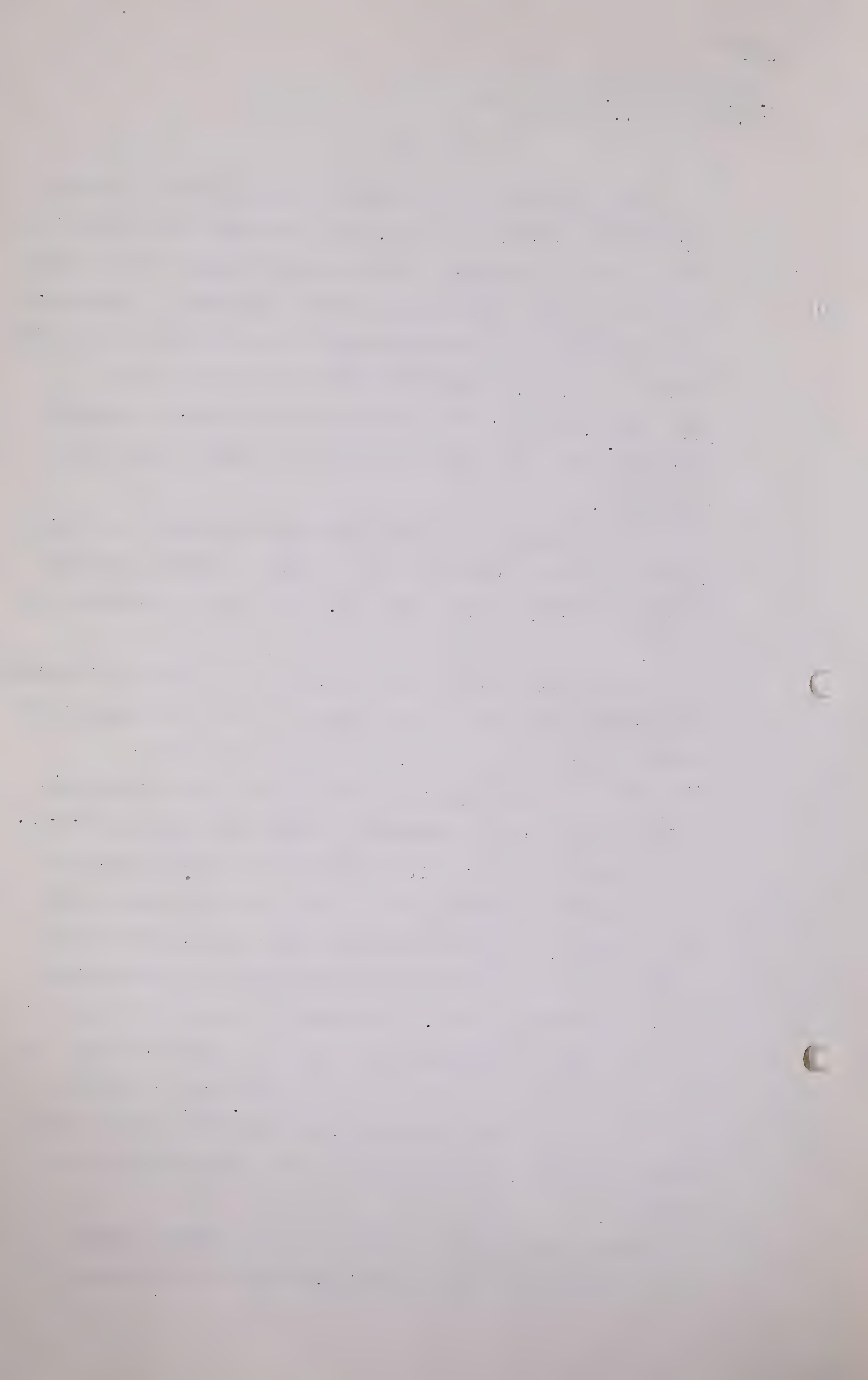
There are one or two qualifications noted at the foot of Statement W-H-42. The first, and these show the sources of some of the information; Deliveries to Madison scrubber have been adopted from W-H-39 on the bases of Madison estimates. Tentative estimates furnished some time ago by British American aggregate 10,017,000 million cubic feet for the four-year period, representing a difference of 5.34%. Madison's estimates have been adopted in order to achieve consistency throughout.

The volumes to be received from producers and the residue remainder are in accordance with tentative British American estimates furnished some time ago, and I was then speaking in March.

Volumes to be repressured represent the difference between British American tentative estimates of residue remainder and Madison estimates of deliveries to scrubbing plant.

W-H-43 is an analysis of the rateable gas for gathering purposes utilizing the estimated volumes suggested in W-H-42. In the four-year period it is estimated that there will be gathered some 27 million MCF of which 4 million was at that time estimated as absorption plant extraction, approximately 5 million was suggested as being chargeable to producers and to the absorption plant. In respect to one-half of the repressured gas 10 million-six will move to market, so that the rateable gas gathered amounts to 19 million-six. The non-rateable gas to 7 million-seven, including fuel and half the repressured gas, making a total net wet gas gathered of 27 million.

At the foot we have a summary of the average annual volumes for the four-year period, showing a total rateable



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volume of 4 million-nine as compared with a non-rateable volume of 1 million-nine.

The next column shows the percentage of each classification to the total handled and the third column the percentage of each rateable group to the total rateable group.

That is all we have to say at the moment with respect to rateable gas.

I can follow on now with a few remarks in connection with the fuel gas contained in Section 5 at page 27.

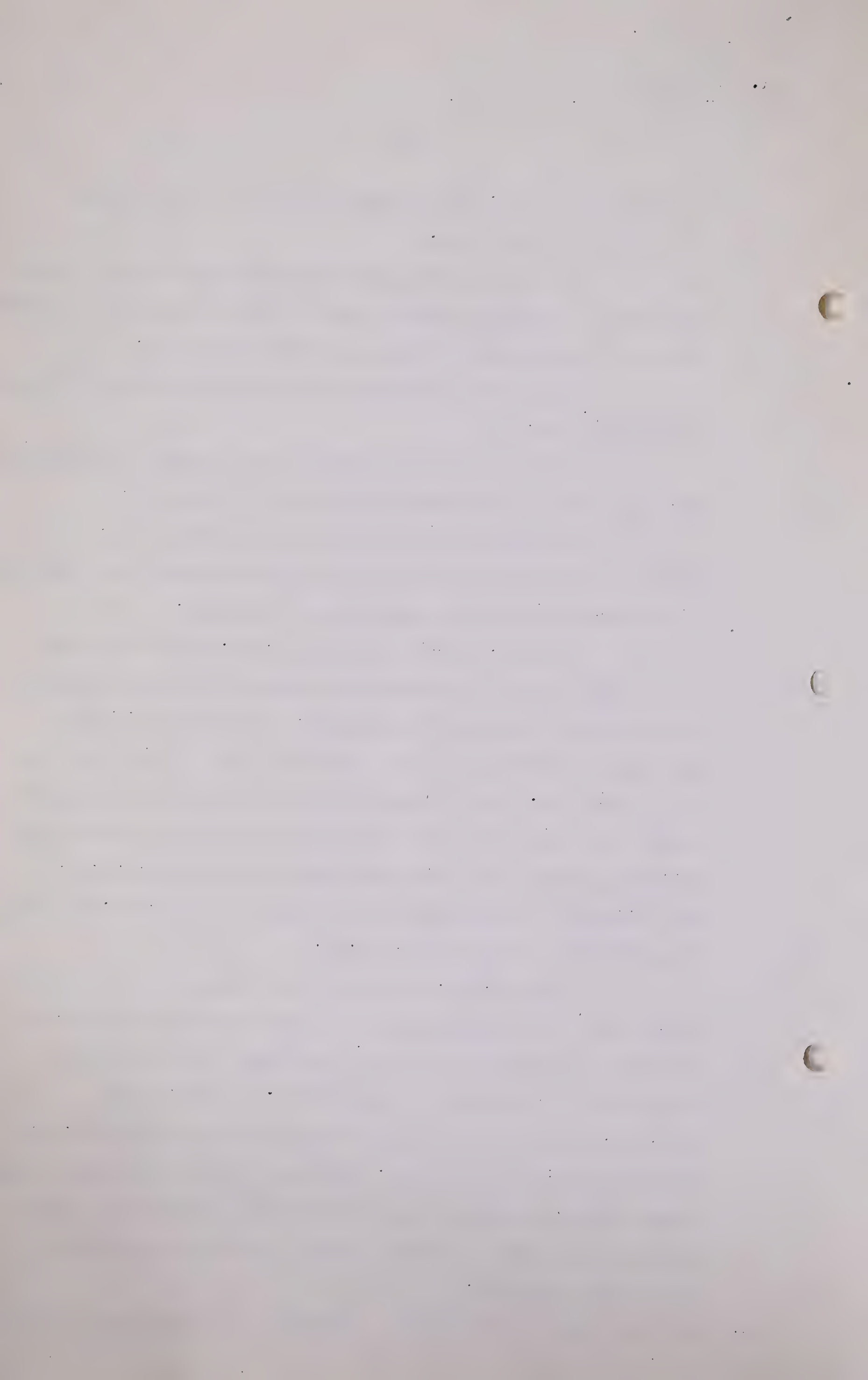
The costs of both companies are predicated, - I should say - the costs submitted by both companies are predicated on the assumption of the free use of fuel gas.

In 1944, Madison utilized 1,177,693 MCF for fuel in the operation of its own plants, apart from gas delivered and charged to affiliated companies. Statement W-H-44, presents a computation of the effect on cost if fuel gas were to be paid for. On the basis of 2¢ to the producer, we had to assume something (and in the case of scrubbed fuel, 2¢ to the scrubbing plant), the producers would receive \$23,553.86, and the scrubbing plant costs would be reduced by \$4,334.52, making a gross total cost of \$27,888.38.

That \$4,334.52 is just the 2 cents that is paid or allowed to the scrubbing plant for the scrubbing service, so that the total cost of the gas, including the scrubbing of certain of it, would be the \$27,888.38, and of that \$27,888.38 the producer would actually only get \$23,000.00.

Q MR. CHAMBERS: Mr. Hamilton, might I interrupt, does that \$4,334.52 take into consideration ^{that} the steam plant cost would be increased somewhat, oh yes, I see you are going to deal with that next.

A Not directly, Mr. Chambers. However, the effect would not be



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serious.

Of this \$13,982.78 would represent an increase in the operating costs of the gas utility business, and \$13,905.60 would be recovered from affiliated companies by way of increased costs of steam and electricity. No provision has been made for enhancing the value of fuel gas by the cost of gathering and compressing attributable to it.

The amount involved is so small that it introduces complexities that are hardly warranted.

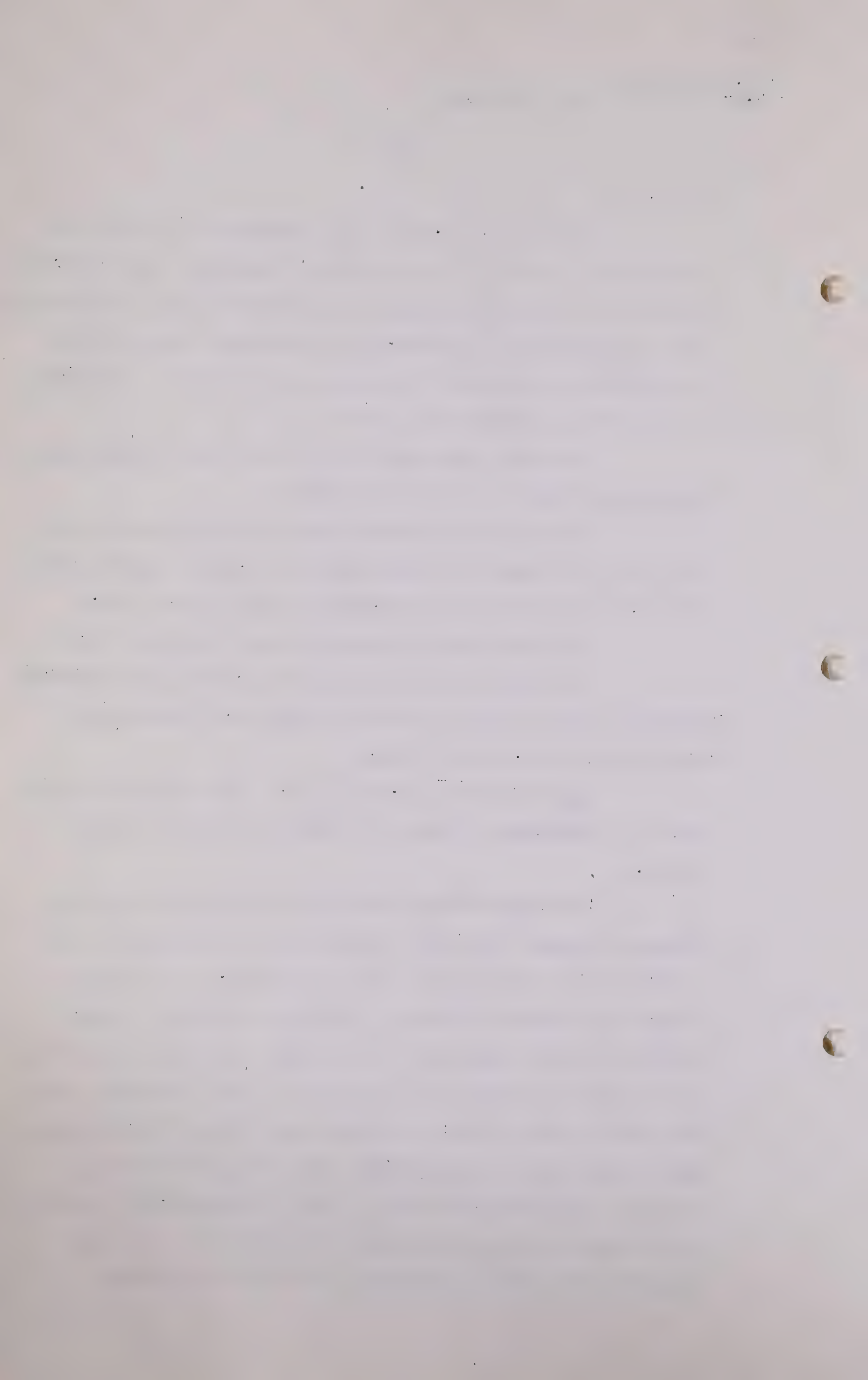
With regard to British American it is assumed that fuel gas will amount to approximately 720,000 MCF in 1945 and 1946, and approximately 648,000 MCF in 1947 and 1948.

I believe those estimates would be reduced now.

Of these amounts approximately 6.73% would represent increased costs of the gas utility operation, representing approximately \$900.00 per annum.

Approximately \$900.00 a year, the remainder of that cost, the remaining 93% would be passed on to the parent company.

Statement W-H-44 shows the effect with regard to Madison of paying for fuel at 2¢ straight or paying for fuel at 2¢ if it is sour and 4¢ if it is scrubbed. We did not go into the question finally of whether it was wet or dry. It was not worth while, but on the basis of a straight 2 cent price scrubbed or sour, the operations of the scrubbing plant would cost \$4600.00 more; the compressor plant \$2500.00 more, Number 1 and Number 3 would cost close to \$2000.00 more; gathering costs \$1200.00 more, a total of \$10,383.08, by which the Madison operating costs would be increased. The cost chargeable to outside consumers, the steam and electric



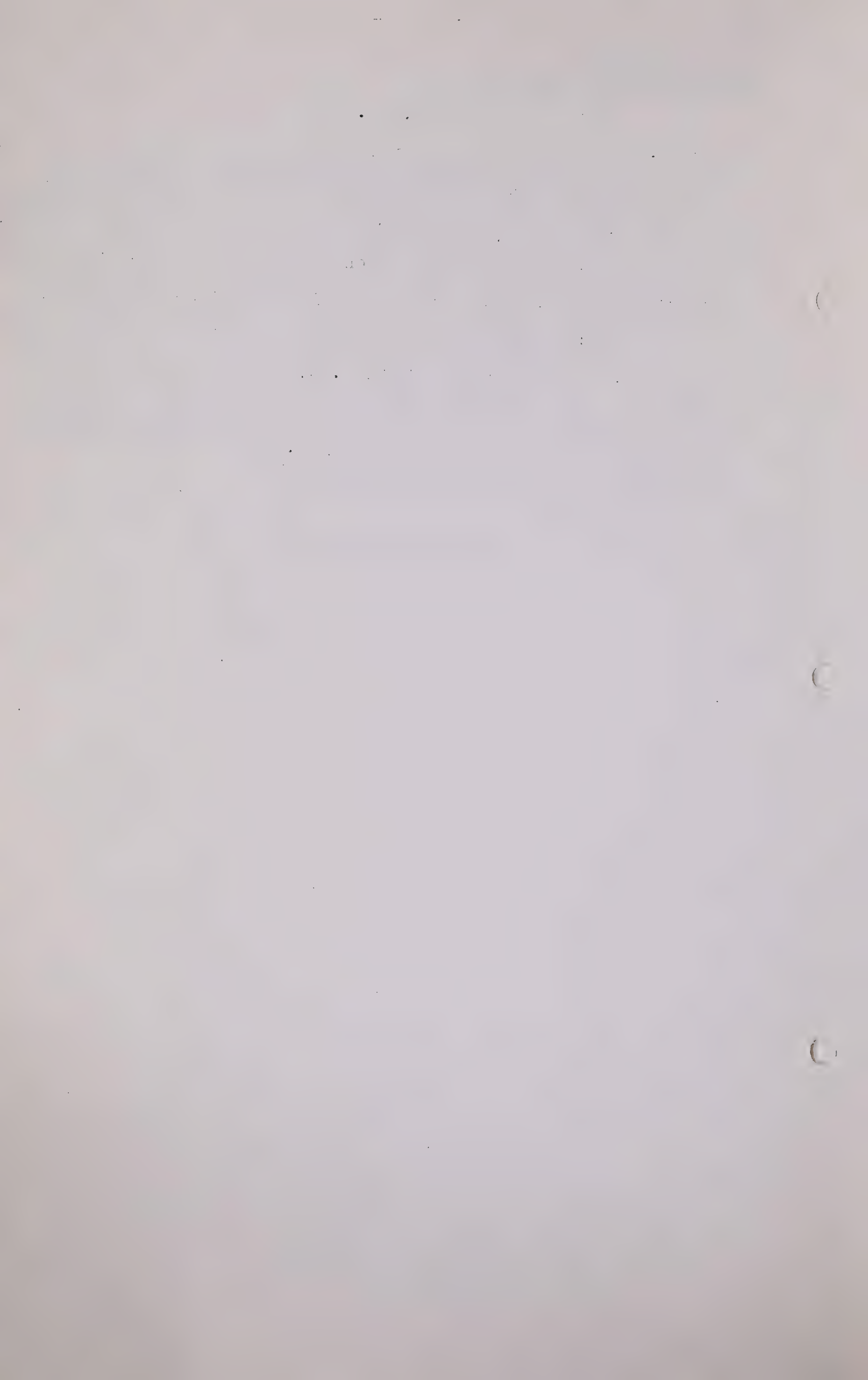
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power would increase by approximately thirteen thousand and the producers would get \$23,553.86 for their gas at that 2¢ cent price. If you increase the value of the scrubbed gas by 2 cents you get the changes in cost as set out in the third column; the net amount going to the producer is the same in either case.

As a matter of fact on the scrubbing operations, of course, the last alternative would be to increase its cost by six thousand, but to give it an incidental revenue of four thousand, a net increase of \$2000.00.

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A We have in Section VI some comments with regard to depreciation. In order to save time in the preparation of this we based our discussion on Madison M-10 which was then available and which we understood would precede our discussion on the subject, so that one would follow naturally from the other.

I am reading now from Page 28:

"SECTION VI DEPRECIATION

Madison's submission M 10, contains an excellent discussion of depreciation principles as related to its operation, and our comments on the subject of depreciation, for brevity, are related thereto.

We agree with Madison on the following points:

1) Unit throughput method is more appropriate than a straight line annual method for the bulk of Madison assets."

Mr. Hill had the same view if you will remember.

"2) Annual rates are more appropriate for fire equipment, transportation and office equipment. Furthermore, the specific rates suggested are regarded as reasonable."

That is by Madison, are regarded as so.

"3) A single throughput factor would have the advantage of simplicity.

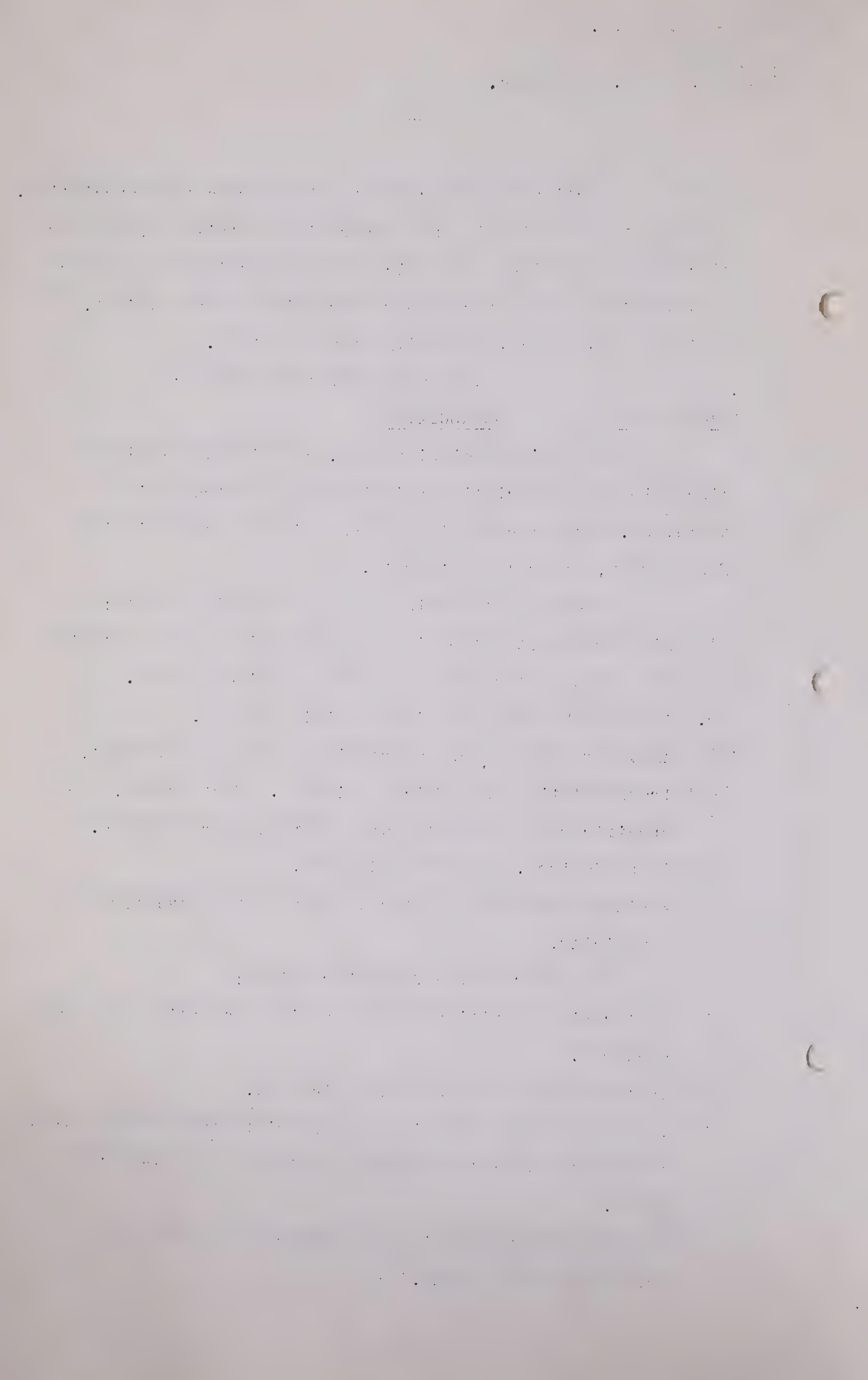
We differ on the following points:

4) That capital additions should be ignored until they have occurred.

5) That salvage values should be ignored.

6) That scrubbing volume is an appropriate throughput factor for assets other than those associated with scrubbing plant.

7) That scrubbing sales is the appropriate factor for scrubbing plant assets."



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Generally speaking, sir, you will recall that the Madison submission was that with the exception of the special assets such as fire equipment, transportation and office equipment, all the remaining assets would be amortized over the life of the field, year by year in proportion to the scrubbed gas sales as being the single factor on which amortization would be calculated.

"The scrubbing sales rate of throughput depreciation does not, however, differ sufficiently from the formulas we would suggest to affect the results substantially in the short run, and we have, therefore, adopted the percentages corresponding to the Madison formula in submitting alternative costs. We feel, however, that the cumulative effect of applying the particular formula suggested is sufficiently material to warrant the substitution of other formulas more closely related to the utilization of the facilities involved.

CAPITAL ADDITIONS

In our view, capital additions should be anticipated where possible in calculating the depreciation charge in order that the depreciation per unit of throughput may be as nearly uniform as possible."

My information is of course that that is not a very important matter and not prepared to make an issue of it, but I think the principle concept is found in the case of a wasting asset.

"SALVAGE VALUES

We recognize that salvage values are difficult to predict. On the other hand, salvage values approved in the first instance can be varied from time to time as the situation requires.

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SCRUBBING SALES VOLUME AS A CRITERION OF UTILIZATION OF PLANT

The propriety of scrubbed sales as a measure of utilization may be tested by application to each class of asset to which Madison suggests it be applied."

To point the remarks which follow, you will recall that Madison proposed that with the exception of that certain class of asset everything else should be amortized for the life of the field on the basis of scrubbing gas sales and we are now prepared to consider that formula in regard to the facts.

"SCRUBBING PLANT

In the four-year period 1945-1948, M 13 indicates Madison proposes to scrub close to four million m.c.f. of gas for delivery to Bow Island, and in Royalite submission R 3, it is inferred that Bow Island repressuring will continue for fifteen years. Assuming then a total estimate of ten million m.c.f. going to Bow Island out of say 330 million m.c.f., the Madison proposal would result in about 3% of disposable gas being left out of depreciation calculations altogether in so far as scrubbing plant were concerned. Bearing in mind that Bow Island storage will likely occur only in the early years, the effect is to postpone depreciation that should be sustained in early years to later years.

To eliminate this we would recommend that the quantity of gas scrubbed should be the base, rather than the quantity of gas to be sold."

G. O. R. RESIDUE TRANSMISSION LINE

In M 10, Paragraph 17, it is suggested that this line may be dismantled in 12 to 15 years and relocated elsewhere. If then, depreciation is provided on a

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scrubbing sales basis (over say 30 years) about one-half the cost would remain unamortized when salvage operations were undertaken."

Which is in our view undesirable as we believe the assets should not be retired while in useful service.

"REPRESSURE LINE

Substantially the same circumstances apply here as for the G. O. R. Residue line, but perhaps not with the same force.

GATHERING

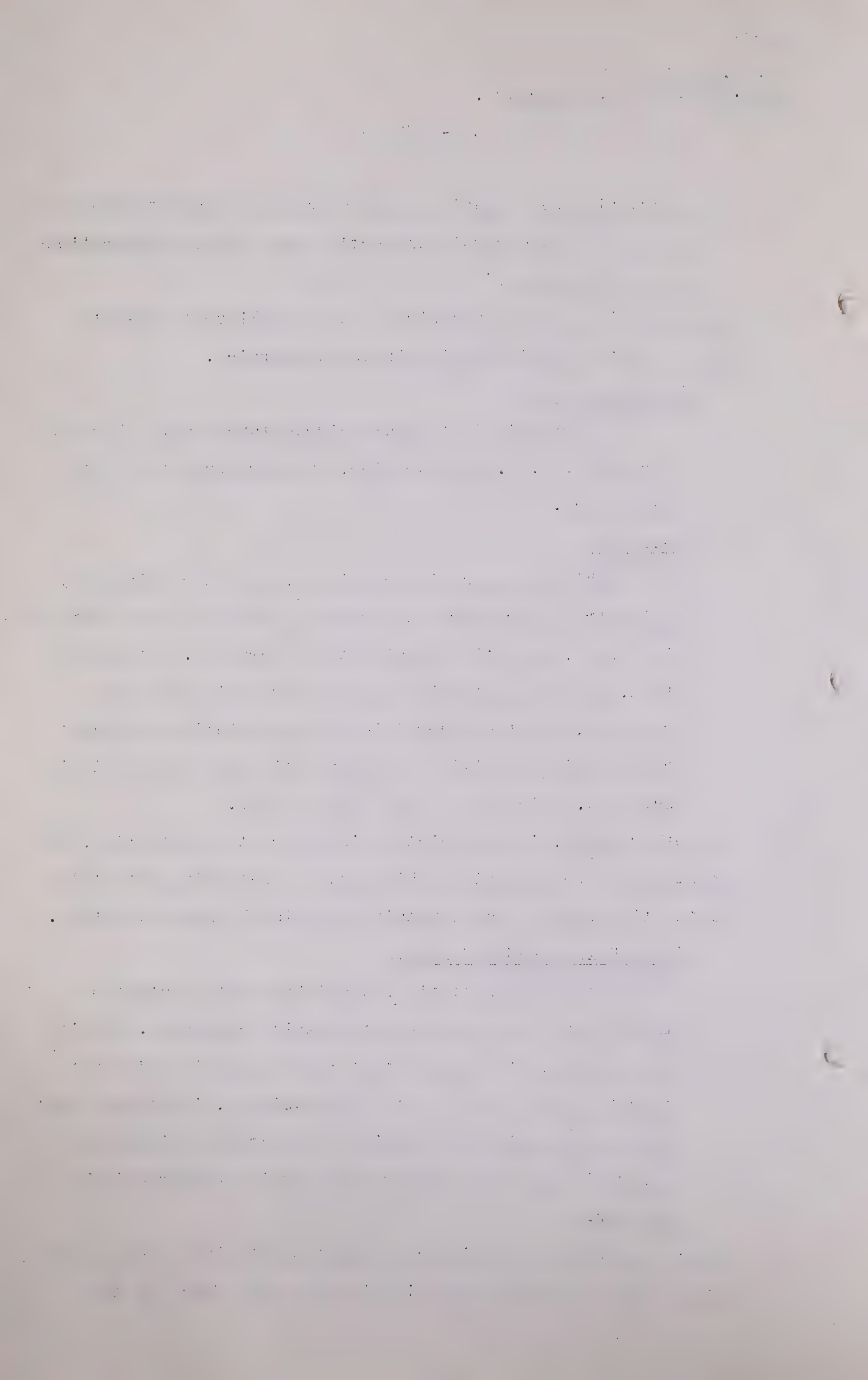
While repressuring continues, gas is continuously being transferred from the gathering areas to the repressuring areas, but still remains to be scrubbed. It follows then, that a substantial volume of gas will have been gathered, but the recognition of depreciation as a cost of gathering it will be delayed until such time as it is scrubbed, which may be many years later."

In other words, if depreciation is the cost of gathering, the cost should be recognized while you are gathering not at the later time when you do something else to the gas you gather.

"BOILER AND ELECTRIC PLANTS

At the present time, about 75% of the output of these plants is chargeable to outside companies. If it is reasonable to suggest that these companies will not operate for the life of the gas business, it follows that the gas operation will ultimately bear four times the charge it does now although the service rendered is no greater."

There has been some evidence on that point since and I do not recall the extent to which it will vary the force of that



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statement.

Then at the top of Page 31 re alternative suggestion. We would suggest in the alternative that classified rates be adopted as follows:

For Gathering Lines and Compression Plants, we suggest the depreciation factor should be the rateable wet gas gathered.

For the Scrubbing Plant the factor should be the rateable scrubbed gas throughput.

The G. O. R. Residue Line - the factor should be the residue throughput.

For the Repressure line, the repressure throughput.

The Boiler Plant and Electric Plant, straight line annual for limited number of years or a reducing percentage by years.

For the Warehouse, Residences, Transportation Equipment, Fire and Office Equipment, straight line annual or appropriate measures.

" Throughput denominators tentatively set can be adjusted as time goes on, resulting merely in the altering of the incidence of cost as between periods without altering materially the incidence of cost as between beneficiaries.

We appreciate that variable rates of depreciation will entail certain accounting complications, but these are not in our view so serious as to outweigh the importance of applying cost as accurately as possible as between functions for which different groups of beneficiaries may be found responsible.

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The use of throughput depreciation rates based on total estimated field gas reserves raises the question as to the variances in service rates resulting from varying field estimates.

Statement WH 45, is presented to show the effect of varying the estimate of field reserves upon the total service costs (Madison only) for one year and for five years.

B. A. UTILITIES

With regard to B. A. depreciation, the following further comments apply:

- 1) The company's submission amortizes the initial cost of automotive equipment over ten years. In our alternative cost computations we have reduced the life to five years without salvage."

I believe that has been adjusted in subsequent submissions.

- 2) Depreciation rates applicable to lines and compressor stations have been based on a "net withdrawal" rather than on a "wet gathered" denominator. In view of the substantial amount of gas to be recycled in this area, we consider this treatment more appropriate. The result is to amortize 28.2% of cost in the four-year period 1945 to 1948, rather than 47.7%."

The Statement WH 45 to which I referred a moment ago is designed to show the effect of errors in the field estimates upon the service rate. If we take the gas reserve as of January 1st, 1944 to be 370 million Mcf. as estimated in Madison M 13, we can trace the effect of a slight variation of 10 million Mcf. which is as set out in Column 2 and shows the increase and decrease in two elements of costs. First of

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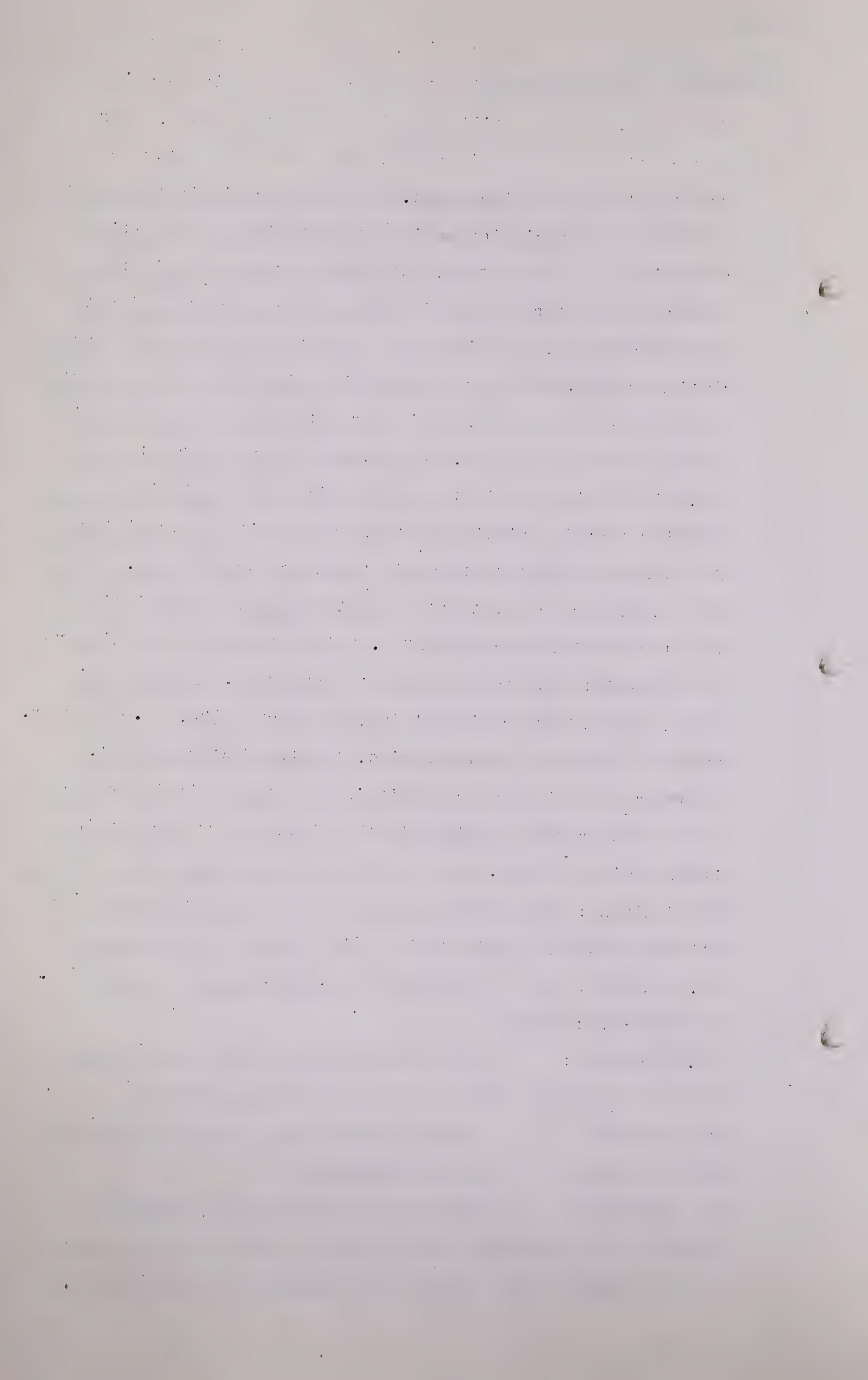
all the effect on depreciation, and secondly, the effect on return on investment which two forces operate in opposite directions. If you utilize a higher reserve figure, your depreciation charge would be reduced but your return on investment would be increased. The tendency is in the short run for the depreciation saving to outweigh the additional cost of the rate of return, but as time goes along in the long run the return on the investment excess cost will not only catch up to, but will fully offset and exceed the depreciation saving. The second comparison is to show the effect of a very substantial variation from the field reserve estimate comparing an amount, an assumed amount of 270 million Mcf, with Madison's estimate at that time of 370 million Mcf or altogether 100 billion feet of gas and it is surprising what a small effect that has in the short or long run. It makes a difference of thirty-four thousand in depreciation offset by a difference of \$2700.00 in return or a net difference of thirty-two thousand for the one year. And over five years, the difference is net 103,000 or only \$25,000.00 a year. If you take a long enough period, the two factors offset. In other words in some cases it is a matter of indifference as to whether you are right in the field reserve or not in its immediate effect.

THE CHAIRMAN: Does anyone wish to start cross-examination or would you rather start it on Monday morning?

MR. CHAMBERS: I would prefer, sir, to start on Monday.

THE CHAIRMAN: Is that unanimous?

MR. McDONALD: Should we not have these principles applied to the Madison operating cost before we examine him. I would suggest that we have the information contained in the



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three points brought in to actual practice as it were, with Madison's operating costs.

- A I could probably present the Madison case as I did the British American case this morning and do it before adjournment. I do not suppose it will take nearly the time it did this morning as I am generally familiar with the format of the different statements.

Madison operating costs are dealt with in Section 5 which are issued with Statements 46-52 in Volume 1. They are prepared on exactly the same form as were the British American that we discussed this morning, although there are naturally certain essential differences. I will read now from....

THE CHAIRMAN: Mr. Hamilton, I am looking at it now. You have ten pages and you have your statement and you are not half way through it and I am going to suggest that we adjourn until Monday morning at 9.30.

- A I did not realize there was so much of it.

(At this time the Hearing was adjourned until Monday,
December 17th, 1945, at 9.30 A.M.)

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This plant is a small tree or shrub, 10 to 20 feet high, with

leaves opposite, ovate, 2 to 4 inches long.

It is a native of the Philippines, and is found in the

lowland forests, especially in the coastal regions.

The fruit is a small, round, red berry, 1/2 inch in diameter.

It is used for medicinal purposes, and is also eaten.

— 4781 —

It is a native of the Philippines, and is found in the

lowland forests, especially in the coastal regions.

The fruit is a small, round, red berry, 1/2 inch in diameter.

It is used for medicinal purposes, and is also eaten.

— 4782 —

It is a native of the Philippines, and is found in the

lowland forests, especially in the coastal regions.

The fruit is a small, round, red berry, 1/2 inch in diameter.

— 4783 —

It is a native of the Philippines, and is found in the

lowland forests, especially in the coastal regions.

The fruit is a small, round, red berry, 1/2 inch in diameter.

